

NACOmatic

Effective: 26-Aug-2010

Expires: 23-Sep-2010



(Your Airplane Picture Here)

Warranty

I make absolutely no warranty nor guarantee whatsoever about the accuracy, availability, applicability and/or correctness of any of the information in this document.

The official, original NACO documents are available for your downloading pleasure from: <http://naco.faa.gov/index.asp?xml=naco/onlineproducts>

Copyright

This compilation is protected by US copyright laws and international copyright treaties.

Limitations

The sale, hosting and/or distribution of this document in any and all forms, is prohibited.

Release from Liability

All users of this compilation must agree to be legally bound hereby, that Douglas R. Ranz ("Released Party") SHALL NOT BE LIABLE FOR MY DEATH OR INJURY TO MY PERSON, OR FOR ANY LOSS FOR DAMAGE TO MY PROPERTY OR REPUTATION caused in any manner whatsoever, whether attributable to the negligence of the Released Party, or for any other reason, occurring during the time that I am operating an aircraft.

I do hereby waive any right of action against the Released Party from any and all causes or claims that I may have against them from the beginning of time. I further agree not to sue on any such cause or claim. This agreement shall not release liability for gross negligence or willful misconduct of the Released Party. I agree to indemnify and hold the Released Party harmless for any losses, judgments, damages or fees he may incur, including but not limited to attorneys fees, arising out any lawsuit related to the planning, flight and/or enforcement of or legal challenge to this agreement. It is my intention that this agreement be interpreted and enforced to the maximum extent allowed by Michigan law.

MI Min Alt#1 -	6	FNT -	309
MI Min Rdr#1 -	11	FPK -	133
MI Min TO#1 -	14	GDW -	335
13C -	445	GLR -	330
1D2 -	575	GOV -	357
35D -	29	GRR -	344
3CM -	94	HAI -	674
3GM -	337	HTL -	388
3TE -	669	HYX -	625
3TR -	554	IKW -	503
48D -	140	IMT -	407
4D0 -	341	IRS -	664
60G -	299	ISQ -	478
6D6 -	361	IWD -	414
6D9 -	297	JXN -	420
6G0 -	147	JYM -	381
77G -	480	LAN -	451
7D3 -	82	LDM -	467
83D -	661	LWA -	653
8D4 -	657	MBL -	474
9D9 -	379	MBS -	630
9G2 -	463	MCD -	471
ACB -	100	MGN -	375
ADG -	25	MKG -	531
AMN -	33	MNM -	496
ANJ -	642	MOP -	515
APN -	38	MTC -	519
ARB -	48	OEB -	142
AZO -	432	OGM -	557
BAX -	74	ONZ -	281
BEH -	103	OSC -	559
BFA -	115	OZW -	393
BIV -	383	PHN -	611
BTL -	84	PLN -	568
C20 -	110	PTK -	583
C91 -	289	PZQ -	616
CAD -	118	RMY -	491
CFS -	124	RNP -	564
CIU -	644	RQB -	112
CMX -	365	SAW -	484
CVX -	128	SJX -	97
D95 -	461	SLH -	136
D98 -	620	TEW -	493
DET -	151	TTF -	507
DRM -	293	TVC -	677
DTW -	178	VLL -	684
DUH -	449	Y31 -	692
ERY -	549	Y47 -	542
ESC -	301	Y70 -	404
FFX -	325	YIP -	246
FKS -	321	YQG -	278

MI Mins - Alternates #1	-	6	HOUGHTON LAKE	.....	HTL	-	388		
MI Mins - Radar #1	-	11	HOWELL	.....	OZW	-	393		
MI Mins - Take-Off #1	-	14	IONIA	.....	Y70	-	404		
ADRIAN	.....	ADG	-	25	IRON MOUNTAIN-KINGS	IMT	-	407	
ALLEGAN	.....	35D	-	29	IRONWOOD	.....	IWD	-	414
ALMA	.....	AMN	-	33	JACKSON	.....	JXN	-	420
ALPENA	.....	APN	-	38	KALAMAZOO	.....	AZO	-	432
ANN ARBOR	.....	ARB	-	48	LAKEVIEW	.....	13C	-	445
BAD AXE	.....	BAX	-	74	LAMBERTVILLE	.....	DUH	-	449
BALDWIN	.....	7D3	-	82	LANSING	.....	LAN	-	451
BATTLE CREEK	.....	BTL	-	84	LAPEER	.....	D95	-	461
BAY CITY	.....	3CM	-	94	LINDEN	.....	9G2	-	463
BEAVER ISLAND	.....	SJX	-	97	LUDINGTON	.....	LDM	-	467
BELLAIRE	.....	ACB	-	100	MACKINAC ISLAND	...	MCD	-	471
BENTON HARBOR	.....	BEH	-	103	MANISTEE	.....	MBL	-	474
BERRIEN SPRINGS	...	C20	-	110	MANISTIQUE	.....	ISQ	-	478
BIG RAPIDS	.....	RQB	-	112	MARLETTE	.....	77G	-	480
BOYNE FALLS	.....	BFA	-	115	MARQUETTE	.....	SAW	-	484
CADILLAC	.....	CAD	-	118	MARSHALL	.....	RMV	-	491
CARO	.....	CFS	-	124	MASON	.....	TEW	-	493
CHARLEVOIX	.....	CVX	-	128	MENOMINEE	.....	MNM	-	496
CHARLOTTE	.....	FPK	-	133	MIDLAND	.....	IKW	-	503
CHEBOYGAN	.....	SLH	-	136	MONROE	.....	TTF	-	507
CLARE	.....	48D	-	140	MOUNT PLEASANT	...	MOP	-	515
COLDWATER	.....	OEB	-	142	MT. CLEMENS	.....	MTC	-	519
DAVISON	.....	6G0	-	147	MUSKEGON	.....	MKG	-	531
DETROIT-GROSSE ILE	ONZ	-	281	NEW HUDSON	.....	Y47	-	542	
DETROIT	.....	DET	-	151	NEWBERRY	.....	ERY	-	549
DETROIT	.....	DTW	-	178	NILES	.....	3TR	-	554
DETROIT	.....	YIP	-	246	ONTONAGON	.....	OGM	-	557
DETROIT	.....	YQG	-	278	OSCODA	.....	OSC	-	559
DOWAGIAC	.....	C91	-	289	OWOSSO	.....	RNP	-	564
DRUMMOND ISLAND	...	DRM	-	293	PELLSTON	.....	PLN	-	568
EAST TAWAS	.....	6D9	-	297	PLYMOUTH	.....	1D2	-	575
EATON RAPIDS	.....	60G	-	299	PONTIAC	.....	PTK	-	583
ESCANABA	.....	ESC	-	301	PORT HURON	.....	PHN	-	611
FLINT	.....	FNT	-	309	ROGERS CITY	.....	PZQ	-	616
FRANKFORT	.....	FKS	-	321	ROMEO	.....	D98	-	620
FREMONT	.....	FFX	-	325	SAGINAW	.....	HYX	-	625
GAYLORD	.....	GLR	-	330	SAGINAW	.....	MBS	-	630
GLADWIN	.....	GDW	-	335	SAULT STE MARIE	...	ANJ	-	642
GRAND HAVEN	.....	3GM	-	337	SAULT STE MARIE	...	CIU	-	644
GRAND LEDGE	.....	4D0	-	341	SOUTH HAVEN	.....	LWA	-	653
GRAND RAPIDS	.....	GRR	-	344	SPARTA	.....	8D4	-	657
GRAYLING	.....	GOV	-	357	ST. IGNACE	.....	83D	-	661
GREENVILLE	.....	6D6	-	361	STURGIS	.....	IRS	-	664
HANCOCK	.....	CMX	-	365	TECUMSEH	.....	3TE	-	669
HARBOR SPRINGS	...	MGN	-	375	THREE RIVERS	.....	HAI	-	674
HASTINGS	.....	9D9	-	379	TRAVERSE CITY	.....	TVC	-	677
HILLSDALE	.....	JYM	-	381	TROY	.....	VLL	-	684
HOLLAND	.....	BIV	-	383	WEST BRANCH	.....	Y31	-	692

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS

ADRIAN, MI

LENAWEE COUNTY RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23

NA when local weather not available.

ALPENA, MI

ALPENA COUNTY RGNL .. RNAV (GPS) Rwy 1

NA when local weather not available.

ANN ARBOR, MI

ANN ARBOR MUNI RNAV (GPS) Rwy 6¹
RNAV (GPS) Rwy 24¹
VOR Rwy 6²
VOR Rwy 24²

¹NA when local weather not available.

²NA when control tower closed.

BAD AXE, MI

HURON COUNTY
MEMORIAL RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 17
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 35

NA when local weather not available.

BATTLE CREEK, MI

W.K. KELLOGG ILS or LOC Rwy 23¹
RADAR-1²
RNAV (GPS) Rwy 5³
RNAV (GPS) Rwy 23³
VOR or TACAN Rwy 5⁴
VOR Rwy 23³
VOR or TACAN or GPS Rwy 31⁴

¹NA when control tower closed.

²NA when Kalamazoo control tower closed.

³NA when local weather not available.

⁴NA when control tower closed except for operators with approved weather reporting service.

NAME ALTERNATE MINIMUMS

BEAVER ISLAND, MI

BEAVER ISLAND RNAV (GPS) Rwy 27
NA when local weather not available.

BELLAIRE, MI

ANTRIM COUNTY RNAV (GPS) Rwy 2¹²
VOR Rwy 2³

¹NA when local weather not available.

²Category D, 900-2 $\frac{1}{2}$.

³Categories A,B, 1000-2; Category C, 1000-2 $\frac{1}{2}$;

Category D, 1000-3.

BENTON HARBOR, MI

SOUTHWEST
MICHIGAN RGNL RNAV (GPS) Rwy 9
VOR Rwy 9

NA when local weather not available.

CADILLAC, MI

WEXFORD COUNTY NDB Rwy 7¹³
NDB Rwy 25²
RNAV (GPS) Rwy 7³
RNAV (GPS) Rwy 25³

¹Categories, A, B, 900-2; Category C, 900-2 $\frac{1}{2}$;

Category D, 900-2 $\frac{1}{2}$.

²Category D, 800-2 $\frac{1}{2}$.

³NA when local weather not available.

CARO, MI

TUSCOLA AREA RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23
VOR/DME-A

NA when local weather not available.

CHARLEVOIX, MI

CHARLEVOIX MUNI RNAV (GPS) Rwy 9
NA when local weather not available.

ALTERNATE MINS

E2

NAME **ALTERNATE MINIMUMS**
CHARLOTTE, MI
 FITCH H BEACH **RNAV (GPS) Rwy 20**
 NA when local weather not available.

COLDWATER, MI
 BRANCH COUNTY
 MEMORIAL **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 25
VOR Rwy 7
VOR/DME Rwy 25
 NA when local weather not available.

DETROIT, MI
 COLEMAN A.
 YOUNG MUNI **ILS or LOC Rwy 33¹**
NDB Rwy 15²
RNAV (GPS) Rwy 15²
RNAV (GPS) Rwy 33²
VOR Rwy 33²
¹ILS, 700-2.
²NA when local weather not available.

WILLOW RUN **VOR or GPS-A**
 Category D, 800-2½.

DETROIT/GROSSE ILE, MI
 GROSSE ILE MUNI **NDB Rwy 4¹**
RNAV (GPS) Rwy 4²
RNAV (GPS) Rwy 22²
VOR-A²
 NA when local weather not available.
¹Category A, B, 1000-2; Category C, 1000-2½;
 Category D, 1000-3.
²Category A, B, 900-2; Category C, 900-2½;
 Category D, 900-2½.

DRUMMOND ISLAND, MI
 DRUMMOND ISLAND **RNAV (GPS) Rwy 8**
RNAV (GPS) Rwy 26
 NA when local weather not available.

ESCANABA, MI
 DELTA COUNTY **ILS or LOC Rwy 9¹**
LOC BC Rwy 27²
RNAV (GPS) Rwy 9²³
RNAV (GPS) Rwy 27²³
VOR Rwy 9²³
VOR Rwy 27²³
VOR Rwy 36²
¹ILS, Category C, 700-2; Category D, 800-2½.
 LOC, Category D, 800-2½.
²Category D, 800-2½.
³NA when local weather not available.

NAME **ALTERNATE MINIMUMS**
FLINT, MI
 BISHOP INTL **ILS or LOC Rwy 9¹**
ILS or LOC Rwy 27¹²
RADAR-1¹
RNAV (GPS) Rwy 27²
¹NA when control tower closed.
²NA when local weather not available.

FRANKFORT, MI
 FRANKFORT DOW
 MEMORIAL FIELD **RNAV (GPS) Rwy 15¹**
RNAV (GPS) Rwy 33¹
VOR/DME-A²
 NA when local weather not available.
¹Category C, 900-2½.
²Categories A,B, 900-2; Category C, 900-2½.

FREMONT, MI
 FREMONT MUNI **RNAV (GPS) Rwy 18**
RNAV (GPS) Rwy 36
VOR Rwy 18
VOR Rwy 36
 NA when local weather not available.

GAYLORD, MI
 GAYLORD RGNL **ILS or LOC Rwy 9¹**
VOR or GPS Rwy 9²
VOR or GPS Rwy 27²
¹ILS, Categories B,C, 700-2; Category D,
 800-2½. LOC, Category D, 800-2½.
²Category D, 800-2½.

GRAND RAPIDS, MI
 GERALD R. FORD INTL ... **ILS or LOC Rwy 8R¹**
ILS or LOC Rwy 26L¹
ILS or LOC Rwy 35¹²
RADAR-1³
RNAV (GPS) Rwy 8L¹
RNAV (GPS) Rwy 8R¹
RNAV (GPS) Rwy 17¹
RNAV (GPS) Rwy 26L¹
RNAV (GPS) Rwy 26R¹
RNAV (GPS) Rwy 35¹
VOR Rwy 35¹
¹NA when local weather not available.
²ILS, Categories A, B, C, 700-2; Category D,
 700-2½. LOC, Category D, 800-2½.
³NA when control tower is closed.

GRAYLING, MI
 GRAYLING AAF **RNAV (GPS) Rwy 14**
 NA when local weather not available.

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010

ALTERNATE MINS

E3



NAME ALTERNATE MINIMUMS
HANCOCK, MI
 HOUGHTON
 COUNTY MEMORIAL ILS or LOC Rwy 31¹²
 LOC/DME BC Rwy 13²³
 RNAV (GPS) Rwy 31³
 VOR Rwy 25³
 VOR Rwy 31³

¹ILS, Category D, 700-2¼; LOC, Category D, 800-2¼.

²NA when local weather not available.

³Category D, 800-2¼.

HARBOR SPRINGS, MI

HARBOR SPRINGS RNAV (GPS) Rwy 10
 RNAV (GPS) Rwy 28

NA when local weather not available.
 Category B, 900-2.

HOLLAND, MI

TULIP CITY RNAV (GPS) Rwy 8
 RNAV (GPS) Rwy 26

NA when local weather not available.

HOUGHTON LAKE, MI

ROSCOMMON COUNTY-
 BLODGETT MEMORIAL RNAV (GPS) Rwy 9
 RNAV (GPS) Rwy 27

NA when local weather not available.

HOWELL, MI

LIVINGSTON COUNTY
 SPENCER J HARDY RNAV (GPS) Rwy 13
 RNAV (GPS) Rwy 31
 VOR Rwy 31

NA when local weather not available.

IRON MOUNTAIN-KINGSFORD, MI

FORD RNAV (GPS) Rwy 1
 RNAV (GPS) Rwy 19
 VOR Rwy 31

NA when local weather not available.

IRONWOOD, MI

GOGEBIC-
 IRON COUNTY RNAV (GPS) Rwy 9
 RNAV (GPS) Rwy 27
 VOR/DME Rwy 9
 VOR/DME Rwy 27

NA when local weather not available.

Category A, B, 900-2; Category C, 900-2¼;
 Category D, 1000-3.

NAME ALTERNATE MINIMUMS
JACKSON, MI

JACKSON COUNTY-REYNOLDS
 FIELD ILS or LOC Rwy 24¹²
 NDB Rwy 24¹
 RNAV (GPS) Rwy 6³
 RNAV (GPS) Rwy 14³
 RNAV (GPS) Rwy 24³
 RNAV (GPS) Rwy 32³
 VOR Rwy 6³
 VOR Rwy 14³
 VOR Rwy 32³
 VOR/DME Rwy 24³

¹NA when control tower closed.

²ILS, Category D, 700-2.

³NA when local weather not available.

KALAMAZOO, MI

KALAMAZOO/BATTLE CREEK
 INTL ILS or LOC Rwy 35¹
 LOC BC Rwy 17¹
 NDB Rwy 35¹
 RADAR-1¹
 VOR Rwy 5¹²
 VOR Rwy 23³

¹NA when control tower closed.

²Category D, NA.

³NA when control tower closed, except for operators with approved weather reporting service.

LUDINGTON, MI

MASON COUNTY RNAV (GPS) Rwy 8
 RNAV (GPS) Rwy 26

NA when local weather not available.

MANISTEE, MI

MANISTEE
 COUNTY-BLACKER ILS or LOC Rwy 27
 ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.

MARQUETTE, MI

SAWYER INTL ILS or LOC Rwy 1¹
 RNAV (GPS) Rwy 19²

¹LOC, NA.

²NA when local weather not available.

MENOMINEE, MI

MENOMINEE-MARINETTE
 TWIN COUNTY RNAV (GPS) Rwy 3
 RNAV (GPS) Rwy 21
 RNAV (GPS) Rwy 32
 VOR-A

NA when local weather not available.

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010



ALTERNATE MINS

E4



NAME ALTERNATE MINIMUMS
MIDLAND, MI
 JACK BARSTOW RNAV (GPS) Rwy 6
 RNAV (GPS) Rwy 24
 VOR-A
 NA when local weather not available.

MONROE, MI
 CUSTER RNAV (GPS) Rwy 3
 RNAV (GPS) Rwy 21
 VOR Rwy 31
 VOR Rwy 21
 NA when local weather not available.
 1Category D, 800-2¼.

MOUNT PLEASANT, MI
 MOUNT PLEASANT MUNI RNAV (GPS) Rwy 9
 RNAV (GPS) Rwy 27
 VOR Rwy 27
 NA when local weather not available.

MUSKEGON, MI
 MUSKEGON COUNTY ILS Rwy 241
 ILS or LOC Rwy 321
 LOC BC Rwy 1412
 RNAV (GPS) Rwy 142
 RNAV (GPS) Rwy 322
 VOR-A1
 1NA when control tower closed.
 2NA when local weather not available.

NEWBERRY, MI
 LUCE COUNTY RNAV (GPS) Rwy 11
 RNAV (GPS) Rwy 29
 NA when local weather not available.

OSCODA, MI
 OSCODA-WURTSMITH RNAV (GPS) Rwy 6
 RNAV (GPS) Rwy 24
 NA when local weather not available.

OWOSSO, MI
 OWOSSO COMMUNITY . RNAV (GPS) Rwy 10
 RNAV (GPS) Rwy 28
 VOR/DME Rwy 28
 NA when local weather not available.

NAME ALTERNATE MINIMUMS
PELLSTON, MI
 PELLSTON RGNL AIRPORT OF
 EMMET COUNTY ILS or LOC Rwy 3212
 RNAV (GPS) Rwy 513
 RNAV (GPS) Rwy 2314
 RNAV (GPS) Rwy 3214
 VOR/DME Rwy 53
 VOR Rwy 2314

1NA when local weather not available.
 2ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
 3Categories A,B, 900-2; Category C, 900-2½;
 Category D, 900-2¾.
 4Category D, 800-2¼.

PONTIAC, MI
 OAKLAND COUNTY
 INTL ILS or LOC Rwy 9R12
 LOC BC Rwy 27L1
 RNAV (GPS) Rwy 9R3
 RNAV (GPS) Rwy 27L3
 VOR Rwy 9R3
 VOR Rwy 27L3

1NA when control tower closed.
 2ILS, LOC, Categories A, B, C, D, 700-2.
 3NA when local weather not available.

SAGINAW, MI
 SAGINAW COUNTY
 H W BROWNE ILS or LOC/DME Rwy 27
 RNAV (GPS) Rwy 91
 RNAV (GPS) Rwy 27
 NA when local weather not available.
 1Category C, 800-2¼.

MBS INTL ILS or LOC Rwy 51
 ILS or LOC Rwy 232
 RADAR-11
 RNAV (GPS) Rwy 53
 RNAV (GPS) Rwy 143
 RNAV (GPS) Rwy 233
 RNAV (GPS) Rwy 323
 VOR Rwy 54
 VOR Rwy 144
 VOR Rwy 324

1NA when control tower closed.
 2DME or radar required; NA when control tower closed.
 3NA when local weather not available.
 4NA for NON-DME equipped aircraft when control tower closed.

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010



NAME ALTERNATE MINIMUMS

SAULT STE MARIE, MI

CHIPPEWA

COUNTY INTL RNAV (GPS) Rwy 16
RNAV (GPS) Rwy 34
VOR-A¹

NA when local weather not available.

¹DME standard, ADF NA.

SOUTH HAVEN, MI

SOUTH HAVEN

AREA RGNL RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 22
VOR Rwy 22

NA when local weather not available.

SPARTA, MI

PAUL C MILLER-

SPARTA RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
VOR-A

NA when local weather not available.

STURGIS, MI

KIRSCH MUNI RNAV (GPS) Rwy 18
RNAV (GPS) Rwy 36

NA when local weather not available.

Category D, 800-2¼.

TRAVERSE CITY, MI

CHERRY CAPITAL ILS Rwy 28¹²
NDB or GPS Rwy 28²³
RNAV (GPS) Rwy 10⁴⁵
VOR or TACAN or GPS-A³
¹ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.

²NA when control tower closed.

³Category C, 800-2¼; Category D, 800-2½.

⁴Categories A, B, 1400-2; Categories C, D, 1400-3.

⁵NA when local weather not available.

WEST BRANCH, MI

WEST BRANCH

COMMUNITY RNAV (GPS) Rwy 9¹
RNAV (GPS) Rwy 27

NA when local weather not available.

¹Category C, 800-2¼; Category D, 800-2½.

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010

RADAR MINS



10238

RADAR INSTRUMENT APPROACH MINIMUMS

BATTLE CREEK, MI W. K. KELLOGG

Amdt. 2, DEC 13, 1990 (FAA)

ELEV 952

RADAR - 119.2 340.9  

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
CIRCLING			A	1420 -1	468	(500-1)	B	1440 -1	488	(500-1)
			C	1480 -1½	528	(600-1½)	D	1520 -2	568	(600-2)
			E	1740 -2¾	788	(800-2¾)				



When Kalamazoo control tower closed, procedure not authorized.

When Battle Creek control tower closed, use Kalamazoo altimeter setting and increase all MDA's 60 feet and Category E visibility ¼ mile.

FLINT, MI BISHOP INTL

Amdt. 8A, APR 13, 2006 (FAA)

ELEV 782

RADAR - 118.8 257.9  



	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	36		ABC	1180 -1	398	(400-1)	D	1180 -1½	398	(400-1½)
	18		AB	1300 -1	523	(600-1)	C	1300 -1½	523	(600-1½)
			D	1300 -1¾	523	(600-1¾)				
CIRCLING	27		ABC	1240 -¾	470	(500-¾)	D	1240 -1	470	(500-1)
			AB	1300 -1	518	(600-1)	C	1300 -1½	518	(600-1½)
			D	1340 -2	558	(600-2)				

CAUTION: Brightly lighted parking lot 4000' E of approach end of rwy 27 can easily be confused for rwy 27.
For inoperative MALSR, increase ASR Rwy 27 Categories A and B visibility to 1.

GRAND RAPIDS, MI GERALD R. FORD INTL

Amdt. 10C, AUG 26, 2010 (FAA)

ELEV 794

RADAR - 128.4 257.6  

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	26L		ABC	1100 /24	310	(400-½)	D	1100 /50	310	(400-1)
	26R		AB	1280 -1	493	(500-1)	C	1280 -1½	493	(500-1½)
			D	1280 -1½	493	(500-1½)				
	8R		AB	1200 -½	406	(500-½)	C	1200 -¾	406	(500-¾)
			D	1200 -1	406	(500-1)				
	8L		AB	1220 -1	433	(500-1)	C	1220 -1½	433	(500-1½)
CIRCLING			D	1220 -1½	433	(500-1½)				
			AB	1280 -1	486	(500-1)	C	1280 -1½	486	(500-1½)
			D	1360 -2	566	(600-2)				

When control tower closed, ASR not authorized.

EC-1

RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS

10238

N1

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010


RADAR INSTRUMENT APPROACH MINIMUMS

KALAMAZOO, MI

Amdt. 9, OCT 25, 2007 (FAA)

ELEV 874

KALAMAZOO/BATTLE CREEK INTL

RADAR-1 121.2 340.9 

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	35		AB	1280 /24	412	(500-½)	C	1280 /40	412	(500-¾)
			D	1280 /50	412	(500-1)				
	17		AB	1320 -1	453	(500-1)	C	1320 -1½	453	(500-1¼)
			D	1320 -1½	453	(500-1½)				
CIRCLING			AB	1380 -1	506	(600-1)	C	1380 -1½	506	(600-1½)
			D	1440 -2	566	(600-2)				

For inoperative MALSR, increase S-35 Cat D visibility to RVR 6000.
When control tower closed, ASR NA.

LANSING, MI

Amdt. 15, APR 8, 2010 (FAA)

ELEV 861

CAPITAL REGION INTL

RADAR - 118.65 133.475 226.4 

			DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	10R	ABC	1260 /24	399	(400-½)	D	1260 /50	399	(400-1)
		AB	1320 /24	469	(500-½)	C	1320 /40	469	(500-¾)
	28L	D	1320 /50	469	(500-1)	C	1320 -1¼	462	(500-1¼)
		AB	1320 -1	462	(500-1)				
	6	D	1320 -1½	462	(500-1½)	CD	1260 -1¼	403	(400-1¼)
		AB	1260 -1	403	(400-1)				
24	AB	1380 -1	519	(600-1)	C	1380 -1½	519	(600-1½)	
	D	1440 -2	579	(600-2)					

For inoperative MALSR, increase S-10R Cat D visibility to RVR 6000.
Visibility reduction by helicopters NA for Rwy 6, and Rwy 24.
Lost Communications (All Rwys): As directed by ATC on initial contact.

EC-1

RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS

RADAR INSTRUMENT APPROACH MINIMUMS

MUSKEGON, MI

Amdt. 15, JUN 3, 2010 (FAA)

ELEV 629

MUSKEGON COUNTY

RADAR - 119.8 339.1 ▽

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	6		AB	1140 -1	517	(600-1)	C	1140 -1½	517	(600-1½)
			D	1140 -1¾	517	(600-1¾)				
	14		AB	1080 -1	453	(500-1)	C	1080 -1¾	453	(500-1¾)
			D	1080 -1½	453	(500-1½)				
	24		ABC	1040 -¾	413	(500-¾)	D	1040 -1	413	(500-1)
	32		AB	1100 /24	471	(500-½)	C	1100 /40	471	(500-¾)
			D	1100 /50	471	(500-1)				
CIRCLING			AB	1140 -1	511	(600-1)	C	1140 -1½	511	(600-1½)
			D	1200 -2	571	(600-2)				

MISSED APPROACH INSTRUCTIONS:

RWY 6: Climb to 2500 then right turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 14: Climb to 2500 then left turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 24: Climb to 2500 then left turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 32: Climb to 2500 then right turn direct MKG VORTAC and hold E, RT, 270° inbound.

Procedure NA when Muskegon Approach Control closed.

For inoperative MALSR increase S-24 visibility Cat A, B, and D ¼ mile.

Visibility reduction by helicopters NA.

Lost communications (All Rwy): As directed by ATC on initial contact.

SAGINAW, MI

Amdt. 9, AUG 1, 1985 (FAA)

ELEV 668

MBS INTL

RADAR - 120.95 126.45 235.625 ▽ ▲

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	23		ABC	1020 -½	359	(400-½)	D	1020 -1	359	(400-1)
	5		ABC	1060 /24	394	(400-½)				
CIRCLING			A	1100 -1	432	(500-1)	B	1120 -1	452	(500-1)
			C	1120 -1½	452	(500-1½)				
						D	1220 -2	552	(600-2)	

Category D S-5 visibility increased to RVR 6000 for inoperative SSALR.

Category D S-23 visibility increased ¼ mile for inoperative MALSR.

When control tower not in operation, procedure NA.

EC-1

RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

ADRIAN, MI

LENAAWEE COUNTY (ADG)

ORIG 07130 (FAA)

TAKE-OFF MINIMUMS: **Rwys 11, 29**, NA-ATC.

NOTE: **Rwy 5**, multiple trees beginning 1837' from departure end of runway, 149' left of centerline, up to 75' AGL/873' MSL. Multiple trees beginning 953' from departure end of runway, 146' right of centerline, up to 74' AGL/872' MSL. **Rwy 23**, tree 1231' from departure end of runway, 633' left of centerline, 55' AGL/849' MSL.

ALLEGAN, MI

PADGHAM FIELD (35D)

AMDT 2 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15, 33**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 11**, climb heading 103° to 1200 before turning right.

NOTE: **Rwy 11**, multiple trees beginning 46' from DER, 10' left of centerline, up to 97' AGL/806' MSL. Multiple trees beginning 1' from DER, 2' right of centerline, up to 100' AGL/794' MSL. **Rwy 29**, multiple trees beginning 37' from DER, 4' left of centerline, up to 83' AGL/802' MSL. Multiple trees beginning 22' from DER, 20' right of centerline, up to 84' AGL/803' MSL.

NAME TAKE-OFF MINIMUMS

ALMA, MI

GRATIOT COMMUNITY (AMN)

ORIG 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 400-3 or std. w/min. climb of 251' per NM to 1400.

NOTE: **Rwy 9**, multiple trees beginning 841' from DER, 438' right of centerline, up to 58' AGL/817' MSL. Multiple trees beginning 1383' from DER, 380' left of centerline, up to 71' AGL/820' MSL. **Rwy 18**, multiple trees beginning 1067' from DER, 152' right of centerline, up to 70' AGL/829' MSL. Multiple trees beginning 923' from DER, 374' left of centerline, up to 70' AGL/824' MSL. **Rwy 27**, multiple trees beginning 306' from DER, 272' right of centerline, up to 81' AGL/840' MSL. Multiple trees beginning 1168' from DER, 593' left of centerline, up to 93' AGL/852' MSL. **Rwy 36**, multiple trees beginning 239' from DER, 3' right of centerline, up to 86' AGL/845' MSL. Multiple trees beginning 143' from DER, 38' left of centerline, up to 103' AGL/852' MSL.

ALPENA, MI

ALPENA COUNTY RGNL (APN)

ORIG 09015 (FAA)

NOTE: **Rwy 1**, tree 2293' from departure end of runway, 525' left of centerline, 100' AGL/749' MSL. **Rwy 7**, trees beginning 858' from departure end of runway, 567' right of centerline up to 100' AGL/774' MSL. Trees beginning 1059' from departure end of runway, 166' left of centerline up to 100' AGL/769' MSL. **Rwy 19**, trees beginning 1789' from departure end of runway, 270' left of centerline up to 100' AGL/779' MSL. Trees beginning 1049' from departure end of runway, 777' right of centerline up to 100' AGL/789' MSL. Vent on cable 44' from departure end of runway, 147' left of centerline up to 25' AGL/685' MSL. **Rwy 25**, trees beginning 652' from departure end of runway, 53' left of centerline up to 100' AGL/755' MSL. Trees beginning 1021' from departure end of runway, 275' right of centerline up to 100' AGL/751' MSL.

ANN ARBOR, MI

ANN ARBOR MUNI (ARB)

AMDT 8 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 12, 30, NA**-
Environmental.

NOTE: **Rwy 6**, multiple trees beginning 442' from departure end of runway, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from departure end of runway, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from departure end of runway, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from departure end of runway, 351' left of centerline, 22' AGL/849' MSL. **Rwy 24**, multiple trees beginning 479' from departure end of runway, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from departure end of runway, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from departure end of runway, 475' right of centerline, 0' AGL/837' MSL.

BAD AXE, MI

HURON COUNTY MEMORIAL (BAX)

AMDT 4 07354 (FAA)

NOTE: **Rwy 4**, vehicle on road 244' from departure end of runway, 531' left of centerline, 15' AGL/774' MSL. Tree 810' from departure end of runway, 43' left of centerline, 100' AGL/859' MSL. Vehicle on road 223' from departure end of runway, 470' right of centerline, 15' AGL/774' MSL. **Rwy 17**, vehicle on road 164' from departure end of runway, on centerline, 15' AGL/784' MSL. Bush 81' from departure end of runway, 497' right of centerline, 4' AGL/757' MSL. Railroad 695' from departure end of runway, 684' right of centerline, 23' AGL/792' MSL. Terrain beginning 222' from departure end of runway, 70' right of centerline, 0' AGL/757' MSL. Trees beginning 855' from departure end of runway, 392' right of centerline, up to 100' AGL/879' MSL. Pole 1135' from departure end of runway, 755' left of centerline, 35' AGL/798' MSL. Terrain beginning 44' from departure end of runway, 9' left of centerline, 0' AGL/765' MSL. Trees beginning 1693' from departure end of runway, 372' left of centerline, up to 100' AGL/859' MSL. **Rwy 22**, terrain beginning 3' from departure end of runway, 172' left of centerline, 0' AGL/765' MSL. Tree 2334' from departure end of runway, 422' left of centerline, 100' AGL/869' MSL. Terrain beginning 49' from departure end of runway, 165' right of centerline, 0' AGL/762' MSL. Railroad 41' from departure end of runway, 390' right of centerline, 23' AGL/782' MSL. **Rwy 35**, antenna on tower 355' from departure end of runway, 478' right of centerline, 34' AGL/793' MSL. Antenna 359' from departure end of runway, 477' right of centerline, 30' AGL/793' MSL. Vehicle on road 575' from departure end of runway, 412' right of centerline, 15' AGL/778' MSL. Trees beginning 1259' from departure end of runway, 53' right of centerline, up to 100' AGL/842' MSL. Trees beginning 1509' from departure end of runway, 375' left of centerline, up to 100' AGL/859' MSL. Tower 1085' from departure end of runway, 698' left of centerline, 63' AGL/822' MSL.

BALDWIN, MI

BALDWIN MUNI (7D3)

ORIG 84075 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 300-1.

BATTLE CREEK, MI

W. K. KELLOGG (BTL)

AMDT 2 91346 (FAA)

TAKE-OFF MINIMUMS: **Rwys 13, 31**, 300-1.

DEPARTURE PROCEDURE: **Rwy 31**, climb runway heading to 1400 before turning.

BAY CITY, MI

JAMES CLEMENTS MUNI (3CM)

AMDT 5 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 18, 23, 27, 36**, 300-1.

Rwy 5, 900-2.

DEPARTURE PROCEDURE: **Rwys 23, 27, 36**, climb runway heading to 2100 before turning. **Rwy 9**, left turn climb heading 070° to 2100 before turning. **Rwy 5**, right turn climb heading 070° to 2100 before turning. **Rwy 18**, right turn climb heading 230° to 2100 before turning.

BEAVER ISLAND, MI

BEAVER ISLAND (SJC)

ORIG 98001 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27**, 300-1.

Rwys 5,14,23,32, NA.

BELLAIRE, MI

ANTRIM COUNTY (ACB)

AMDT 6 06215 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, 700-3 or std. w/ a min. climb of 417' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 2**, climb heading 022° to 1200 before turning right. **Rwy 20**, climb heading 202° to 1300 before turning left.

NOTE: **Rwy 2**, road 385' from departure end of runway, 528' right of centerline, 15' AGL/646' MSL. Multiple trees beginning 2535' from departure end of runway, 96' left of centerline, up to 100' AGL/884' MSL. Multiple trees beginning 406' from departure end of runway, 235' right of centerline, up to 100' AGL/1147' MSL. Tower 2.57 NM from departure end of runway, 3271' right of centerline, 168' AGL/1198' MSL.

Rwy 20, multiple trees beginning 64' from departure end of runway, 204' right of centerline up to 100' AGL/693' MSL. Multiple buildings and antenna on tower beginning 2641' from departure end of runway, 909' right of centerline, up to 121' AGL/721' MSL. Multiple trees beginning 125' from departure end of runway, 220' left of centerline, up to 100' AGL/720' MSL.

BENTON HARBOR, MI

SOUTHWEST MICHIGAN RGNL (BEH)

AMDT 6 10070 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1½ or std. w/a min. climb of 283' per NM to 900.

NOTE: **Rwy 9**, trees beginning 535' from DER, 409' right of centerline, up to 100' AGL/729' MSL. Tree 2414' from DER, 803' left of centerline, 69' AGL/708' MSL. Fence beginning 175' from DER, 484' right of centerline, up to 7' AGL/656' MSL. **Rwy 13**, trees beginning 727' from DER, 75' right of centerline, up to 100' AGL/695' MSL. Pole 895' from DER, 216' right of centerline, 22' AGL/671' MSL. Trees beginning 1135' from DER, 59' left of centerline, up to 100' AGL/769' MSL. **Rwy 18**, trees beginning 715' from DER, 60' right of centerline, up to 97' AGL/727' MSL. Pole 576' from DER, 266' right of centerline, 25' AGL/652' MSL. Tree 1317' from DER, 171' left of centerline, 70' AGL/694' MSL. **Rwy 27**, trees beginning 58' from DER, 301' right of centerline, up to 100' AGL/744' MSL. Obstruction light on LOC 66' from DER, 43' right of centerline, 10' AGL/631' MSL. Pole 146' from DER, 312' left of centerline, 49' AGL/663' MSL. Rod 144' from DER, 312' left of centerline, 48' AGL/662' MSL. Trees beginning 130' from DER, 87' left of centerline, up to 100' AGL/689' MSL. Building 106' from DER, 262' left of centerline, 20' AGL/644' MSL. Obstruction light on LOC 66' from DER, on centerline, 10' AGL/630' MSL. **Rwy 31**, trees beginning 809' from DER, 62' right of centerline, up to 100' AGL/819' MSL. Transmission tower 2164' from DER, 108' left of centerline, 73' AGL/703' MSL. Transmission tower 2221' from DER, 389' right of centerline, 75' AGL/694' MSL. Tree beginning 1103' from DER, 164' left of centerline, up to 100' AGL/769' MSL. **Rwy 36**, trees beginning 107' from DER, 54' right of centerline, up to 95' AGL/710' MSL. Tree 106' from DER, 53' left of centerline, 30' AGL/637' MSL. Transmission tower 2661' from DER, 103' left of centerline, 102' AGL/711' MSL.

BERRIEN SPRINGS, MI

ANDREW UNIVERSITY AIRPARK (C20)

ORIG 03023 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 13, 21**, NA. **Rwy 31**, 700-1½ or std. with a min. climb of 260' per NM to 1500. NA at night.

NOTE: **Rwy 31**, tower 6789' northeast of departure end of runway, 565' AGL/1224' MSL.

BIG RAPIDS, MI

ROBEN-HOOD (RQB)

AMDT 5 96116 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 27**, 300-1.

BOYNE FALLS, MI

BOYNE MOUNTAIN (BFA)

AMDT 3 96340 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 1000-1. **Rwy 35**, 500-1.

DEPARTURE PROCEDURE: **Rwys 17, 35**, climb runway heading to 2000 before turning.

CADILLAC, MI

WEXFORD COUNTY (CAD)

AMDT 7 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 25**, climb heading 250° to 1800 before turning left.

NOTE: **Rwy 7**, trees beginning 783' from DER, 129' right of centerline, up to 53' AGL/1348' MSL. Trees beginning 849' from DER, 348' left of centerline, up to 74' AGL/1378' MSL. Poles beginning 1221' from DER, 596' left of centerline, up to 30' AGL/1336' MSL. Poles beginning 1228' from DER, 366' right of centerline, up to 38' AGL/1333' MSL. Train and tracks 1386' from DER, 819' left of centerline, 23' AGL/1335' MSL. **Rwy 25**, bush 14' from DER, 275' right of centerline, 10' AGL/1317' MSL. Vehicle and road 660' from DER, 623' left of centerline, 15' AGL/1327' MSL.

CARO, MI

TUSCOLA AREA (CFS)

AMDT 1 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwys 12, 30**, NA-Environmental.

NOTE: **Rwy 5**, vehicle on highway 2163' from departure end of runway, 648' left of centerline, 17' AGL/786' MSL. Trees beginning 865' from departure end of runway, 248' right of centerline, up to 100' AGL/809' MSL. **Rwy 23**, trees beginning 990' from departure end of runway, 581' right of centerline, up to 100' AGL/789' MSL.

CHARLEVOIX, MI

CHARLEVOIX MUNI (CVX)

AMDT 4 05020 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, N/A.

NOTES: **Rwy 9**, terrain beginning at departure end of runway, left and right of centerline up to 660' MSL. **Rwy 27**, terrain beginning at departure end of runway, left and right of centerline up to 693' MSL.

CHARLOTTE, MI

FITCH H. BEACH (FPK)

AMDT 2 92065 (FAA)

TAKE-OFF MINIMUMS: **Rwys 2, 14, 20, 32, 300-1.**

DEPARTURE PROCEDURE: **Rwy 20**, climb runway heading to 1500 before turning.

CHEBOYGAN, MI

CHEBOYGAN COUNTY (SLH)

AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 10, 16, 300-1.**

CLARE, MI

CLARE MUNI (48D)

TAKE-OFF MINIMUMS: **Rwys 8, 13, 26, 31, 300-1.**

COLDWATER, MI

BRANCH COUNTY MEMORIAL (OEB)

AMDT 4 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 16, 34, NA - Environmental.**

NOTE: **Rwy 4**, vehicles on road and trees beginning 5' from departure end of runway, 92' right of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 347' from departure end of runway, 317' left of centerline, up to 100' AGL/1,059' MSL. **Rwy 7**, trees beginning 1246' from departure end of runway, 430' left of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 154' from departure end of runway, 315' right of centerline, up to 100' AGL/1039' MSL. Pole 336' from departure end of runway, 274' right of centerline, 18' AGL/977' MSL. **Rwy 22**, trains on railroad and trees beginning 769' from departure end of runway, 986' left to 945' right of centerline, up to 100' AGL/1099' MSL. **Rwy 25**, vehicles on road and trees beginning 1171' from departure end of runway, 394' left of centerline, up to 100' AGL/1,059' MSL. Trees beginning 732' from departure end of runway, 95' right of centerline, up to 100' AGL/1034' MSL.

DAVISON, MI

ATHELONE WILLIAMS MEMORIAL (6G0)

AMDT 2 97338 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26, 300-1.**

DETROIT, MI

COLEMAN A. YOUNG MUNI (DET)

AMDT 6 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25, 300-2** or std. w/min. climb of 211' per NM to 1400, or alternatively, w/ standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 33**, climb heading 328° to 1800 before turning.

NOTE: **Rwy 7**, multiple trees beginning 232' from departure end of runway, 20' left of centerline, up to 60' AGL/687' MSL. Multiple trees beginning 283' from departure end of runway, 44' right of centerline, up to 56' AGL/680' MSL. Stack 533' from departure end of runway, 66' right of centerline, 50' AGL/671' MSL. Obstruction light on stack on building 566' from departure end of runway, 18' right of centerline, 50' AGL/671' MSL. Obstruction light on floodlight 622' from departure end of runway, 104' left of centerline, 41' AGL/668' MSL. Light standard 149' from departure end of runway, 138' left of centerline, 37' AGL/654' MSL. Light standard 227' from departure end of runway, 105' right of centerline, 33' AGL/654' MSL. Antenna on building 936' from departure end of runway, 84' right of centerline, 43' AGL/670' MSL. Obstruction light floodlight 909' from departure end of runway, 96' right of centerline, 41' AGL/668' MSL. Pole 466' from departure end of runway, 198' right of centerline, 30' AGL/654' MSL. Obstruction light on pole 132' from departure end of runway, on centerline, 16' AGL/637' MSL. **Rwy 15**, multiple trees beginning 589' from departure end of runway, 221' left of centerline, up to 69' AGL/683' MSL. Multiple trees beginning 299' from departure end of runway, 289' right of centerline, up to 52' AGL/679' MSL. Antenna on airport beacon 662' from departure end of runway, 667' left of centerline, 81' AGL/695' MSL. Pipe on obstruction light building 783' from departure end of runway, 597' left of centerline, 62' AGL/676' MSL. Obstruction light on building 1473' from departure end of runway, 556' right of centerline, 68' AGL/692' MSL. Tower 3376' from departure end of runway, 1118' right of centerline, 103' AGL/723' MSL. Antenna on building 803' from departure end of runway, 522' right of centerline, 35' AGL/656' MSL. Building 3749' from departure end of runway, 569' left of centerline, 114' AGL/723' MSL. Floodlight on building 1611' from departure end of runway, 657' left of centerline, 53' AGL/667' MSL. Rod on obstruction light building 450' from departure end of runway, 317' left of centerline, 20' AGL/637' MSL. **Rwy 25**, tower 2828' from departure end of runway, 1225' left of centerline, 141' AGL/770' MSL. Multiple trees beginning 909' from departure end of runway, 133' left of centerline, up to 76' AGL/703' MSL. Multiple trees beginning 334' from departure end of runway, 132' right of centerline, 58' AGL/685' MSL. Obstruction light on building 48' from departure end of runway, 240' left of centerline, 41' AGL/662' MSL. Railroad 1' from departure end of runway, 126' left of centerline, 29' AGL/650' MSL. Obstruction light on stack 454' from departure end of runway, 45' left of centerline, 35' AGL/659' MSL. Railroad 190' from departure end of runway, 40' left of centerline, 29' AGL/650' MSL. Obstruction light stack on building 949' from departure end of runway, 44' left of centerline, 41' AGL/668' MSL. Stack 958' from departure end of runway, 12' left of centerline, 41' AGL/668' MSL. Light standard 701' from departure end of runway, 145' right of centerline, 26' AGL/653' MSL. Stack 9474' from departure end of runway, 2415' left of centerline, 241' AGL/872' MSL.

26 AUG 2010 to 23 SEP 2010

26 AUG 2010 to 23 SEP 2010

DETROIT, MI (CON'T)

COLEMAN A. YOUNG MUNI (CON'T)

Rwy 33, multiple trees beginning 113' from departure end of runway, 118' left of centerline, up to 73' AGL/694' MSL. Multiple trees beginning 572' from departure end of runway, 84' right of centerline, up to 92' AGL/709' MSL. Flag pole 963' from departure end of runway, 379' left of centerline, 28' AGL/658' MSL.

DETROIT METROPOLITAN/WAYNE COUNTY (DTW)

ORIG 06159 (FAA)

NOTE: Rwy 3R, headwall 399' from departure end of runway, 566' right of centerline, 17' AGL/647' MSL. **Rwy 4L**, multiple transmission towers 1516' from departure end of runway, 827' left of centerline, up to 60' AGL/690' MSL, multiple antennas 2751' from departure end of runway, 762' right of centerline, up to 84' AGL/714' MSL. **Rwy 4R**, antenna on building 3348' from departure end of runway, 1301' left of centerline, 100' AGL/736' MSL. **Rwy 9L**, multiple trees 968' to 2519' from departure end of runway, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL. **Rwy 9R**, tree 1837' from departure end of runway, 947' right of centerline, 50' AGL/686' MSL. **Rwy 21L**, multiple trees 1079' to 3910' from departure end of runway, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL. **Rwy 22L**, multiple trees 794' to 3694' from departure end of runway, 611' right of centerline and 1381' left of centerline, up to 101' AGL/740' MSL. **Rwy 27R**, rod on ASR 4461' from departure end of runway, 464' left of centerline, 106' AGL/756' MSL.

WILLOW RUN (YIP)

AMDT 9 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27R**, 200-1½ or std. w/ min. climb of 206' per NM to 1000.

NOTE: Rwy 5L, multiple trees beginning 1438' to 2887' from departure end of runway, from 119' to 438' left of centerline, up to 79' AGL/785' MSL. **Rwy 5R**, multiple trees beginning 1877' to 2472' from departure end of runway, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL. **Rwy 9R**, multiple trees beginning 827' to 2598' from departure end of runway, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL. **Rwy 23L**, tree 1304' from departure end of runway, 438' right of centerline, 42' AGL/757' MSL. Tree 2457' from departure end of runway, 720' left of centerline, 66' AGL/781' MSL. **Rwy 23R**, multiple trees and road with vehicle beginning 587' to 1333' from departure end of runway, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL. **Rwy 27L**, multiple trees and poles beginning 1273' to 2024' from departure end of runway, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL. **Rwy 27R**, railroad and lights beginning 564' to 1565' from departure end of runway, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from departure end of runway, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from departure end of runway, 502' left of centerline, 162' AGL/900' MSL. **Rwy 32**, multiple trees and poles beginning 701' to 1884' from departure end of runway, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from departure end of runway, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

DETROIT/GROSSE ILE, MI

GROSSE ILE MUNI (ONZ)

AMDT 4 97198 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 17, 22**, 300-1.

Rwy 35, 800-2 or 300-1 with a min. climb of 210' per NM to 1400.

DOWAGIAC, MI

DOWAGIAC MUNI (C91)

AMDT 5 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 21**, NA-Environmental.

NOTE: Rwy 9, building, 258' from DER, 549' right of centerline, 26' AGL/778' MSL. Multiple poles beginning 372' from DER, 432' right of centerline, up to 42' AGL/795' MSL. Antenna, 459' from DER, 367' right of centerline, 35' AGL/787' MSL. Antenna, 615' from DER, 341' right of centerline, 35' AGL/775' MSL. Multiple poles beginning 654' from DER, 341' left of centerline, up to 48' AGL/779' MSL. Trees beginning 667' from DER, 21' left of centerline, up to 77' AGL/839' MSL. Trees beginning 864' from DER, 7' right of centerline, up to 121' AGL/879' MSL. **Rwy 27**, trees beginning 21' from DER, 33' right of centerline, up to 93' AGL/828' MSL. Trees beginning 154' from DER, 112' left of centerline, up to 111' AGL/837' MSL.

DRUMMOND ISLAND, MI

DRUMMOND ISLAND (DRM)

ORIG 82301 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26, 18, 36**, 300-1.

EAST TAWAS, MI

IOSCO COUNTY (6D9)

ORIG 81106 (FAA)

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1100 before turning.

EATON RAPIDS, MI

SKYWAY ESTATES (60G)

ORIG 90235 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, 300-1.

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 2500 before turning.

ESCANABA, MI

DELTA COUNTY (ESC)

ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36**, 400-2¼ or std. w/ min. climb of 261' per NM to 1100.

NOTE: Rwy 9, vehicles on roadway at DER, 272' right of centerline, 15' AGL/607' MSL. Trees beginning 1013' from DER, 444' left of centerline, up to 100' AGL/690' MSL. Trees beginning 1185' from DER, 55' right of centerline, up to 100' AGL/690' MSL. **Rwy 18**, buildings 1' from DER, 480' right of centerline, up to 26' AGL/616' MSL. Fences 139' from DER, 402' right of centerline, up to 9' AGL/599' MSL. Pole 255' from DER, 563' right of centerline, 20' AGL/618' MSL. Trees beginning 329' from DER, 18' left of centerline, up to 100' AGL/664' MSL. Trees beginning 375' from DER, 19' right of centerline, up to 100' AGL/673' MSL. **Rwy 36**, tower 1.87 NM from DER, 2362' left of centerline, 293' AGL/915' MSL. Vehicles on roadway beginning 41' from DER, 40' right of centerline, 15' AGL/621' MSL. Trees beginning 349' from DER, 555' right of centerline, up to 100' AGL/697' MSL. Trees beginning 366' from DER, 2' left of centerline, up to 100' AGL/700' MSL.



10210

FLINT, MI

BISHOP INTL (FNT)

AMDT 5 02052 (FAA)

NOTE: **Rwy 18**, trees 1200' from departure end of runway, 500' right of centerline, 65' AGL/863' MSL.**FRANKFORT, MI**

FRANKFORT DOW MEMORIAL FIELD (FKS)

AMDT 2 97282 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 500-2 or std. with a min. climb of 360' per NM to 1300. **Rwy 33**, 300-2.DEPARTURE PROCEDURE: **Rwy 33**, climb runway heading to 1500 before turning.**FREMONT, MI**

FREMONT MUNI (FFX)

ORIG 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1½ or std. w/a min climb of 211' per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, take-off must occur no later than 1400' prior to DER.NOTE: **Rwy 9**, trees beginning 947' from DER, on centerline, up to 100' AGL/866' MSL. **Rwy 18**, trees beginning 1055' from DER, 763' right of centerline, up to 100' AGL/859' MSL. Pole 1140' from DER, 617' right of centerline, 27' AGL/784' MSL. Trees beginning 2276' from DER, 1029' left of centerline, up to 100' AGL/847' MSL. **Rwy 27**, trees beginning 816' from DER, 635' right of centerline, up to 100' AGL/876' MSL. Trees beginning 2640' from DER on centerline, up to 100' AGL/876' MSL. Trees beginning 1.18 NM from DER, 1830' right of centerline, up to 100' AGL/960' MSL.**Rwy 36**, terrain 81' from DER, 484' left of centerline, 774' MSL. Transmission poles beginning 1157' from DER, 728' left to 497' right of centerline, up to 40' AGL/817' MSL. Catenary 1564' from DER, 41' right of centerline, 37' AGL/814' MSL. Trees beginning 1584' from DER, 577' left to 412' right of centerline, up to 67' AGL/844' MSL.**GAYLORD, MI**

GAYLORD RGNL (GLR)

ORIG 09127 (FAA)

NOTE: **Rwy 9**, trees beginning 917' from DER, 318' right of centerline, up to 57' AGL/1387' MSL. Trees beginning 918' from DER, 357' left of centerline, up to 79' AGL/1407' MSL. Ceilometer 166' from DER, 258' left of centerline, 4' AGL/1334' MSL. **Rwy 18**, powerline pylon 2125' from DER, 917' right of centerline, 79' AGL/1398' MSL. Bushes beginning 18' from DER, 255' left of centerline, up to 21' AGL/1338' MSL. **Rwy 27**, trees beginning 2870' from DER, 345' right of centerline, up to 83' AGL/1403' MSL. Tree 2906' from DER, 234' left of centerline, 75' AGL/1395' MSL. **Rwy 36**, trees and bush beginning 79' from DER, 191' left of centerline, up to 54' AGL/1374' MSL.**GLADWIN, MI**

CHARLES ZETTEL MEMORIAL (GDW)

AMDT 2 97086 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 600-2.**Rwy 33**, 500-2.**GRAND HAVEN, MI**

GRAND HAVEN MEMORIAL AIRPARK (3GM)

AMDT 4 83272 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.DEPARTURE PROCEDURE: **Rwys 9, 18, 27, 36**, climb runway heading to 1100 before turning.**GRAND LEDGE, MI**

ABRAMS MUNI (4D0)

AMDT 2 93147 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 27, 36**, 300-1 or std. with a min. climb of 300' per NM to 1200.**GRAND RAPIDS, MI**

GERALD R. FORD INTL (GRR)

AMDT 2 09183 (FAA)

NOTE: **Rwy 8L**, vehicle on road 20' from DER, 156' left of centerline, 15' AGL/794' MSL. Trees beginning 1419' from DER, 740' left of centerline, up to 100' AGL/859' MSL. **Rwy 17**, trees beginning 1382' from DER, 134' left of centerline, up to 100' AGL/929' MSL. Trees beginning 1389' from DER, 819' right of centerline, up to 100' AGL/899' MSL. **Rwy 26R**, terrain beginning 102' from DER, 381' right of centerline, up to 808' MSL. **Rwy 35**, vehicle on road 742' from DER, 675' left of centerline, up to 15' AGL/804' MSL. Trees beginning 2002' from DER, 715' left of centerline, up to 100' AGL/869' MSL. Trees beginning 1339' from DER, 7' right of centerline, up to 100' AGL/879' MSL.**GRAYLING, MI**

GRAYLING AAF (GOV)

AMDT 3 10154 (FAA)

NOTE: **Rwy 5**, tree 1192' from DER, 275' right of centerline, 56' AGL/1215' MSL. Tree 1684' from DER, 600' left of centerline, 56' AGL/1225' MSL. **Rwy 14**, tree 435' from DER, 402' right of centerline, 57' AGL/1216' MSL. Antenna 3937' from DER, 1179' right of centerline, 136' AGL/1279' MSL. **Rwy 23**, trees beginning 1438' from DER, 29' right of centerline, up to 100' AGL/1269' MSL. **Rwy 32**, trees beginning 1611' from DER, 50' left of centerline, up to 66' AGL/1216' MSL.**GREENVILLE, MI**

GREENVILLE MUNI (6D6)

AMDT 2 02164 (FAA)

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1.**HANCOCK, MI**

HOUGHTON COUNTY MEMORIAL (CMX)

AMDT 2 89208 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, 300-1.DEPARTURE PROCEDURE: **Rwys 25, 31**, climb runway heading to 1500 before turning.

10210



HARBOR SPRINGS, MI

HARBOR SPRINGS (MGN)

AMDT 2 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 28**, 300-1½ or std. w/ min. climb of 295' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 10**, Climb heading 101° to 1400 before proceeding on course. **Rwy 28**, Climb heading 281° to 2000 before turning right.

NOTE: **Rwy 10**, trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/788' MSL. Vehicle and road beginning 188' from departure end of runway, left to right of centerline, up to 15' AGL/736' MSL. Trees beginning 1671' from departure end of runway, 720' left of centerline, up to 100' AGL/821' MSL. **Rwy 28**, trees beginning abeam departure end of runway, 398' left of centerline, up to 100' AGL/723' MSL. Trees beginning abeam departure end of runway, 313' right of centerline, up to 100' AGL/936' MSL. Vehicle and road beginning abeam departure end of runway, left to right of centerline, up to 15' AGL/720' MSL.

HASTINGS, MI

HASTINGS (9D9)

ADMT 4 95117 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,12,18,27**, 300-1.

HILLSDALE, MI

HILLSDALE MUNI (JYM)

ORIG 97310 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1.

HOLLAND, MI

TULIP CITY (BIV)

AMDT 1 09183 (FAA)

NOTE: **Rwy 8**, vehicles on road beginning 48' from DER, 500' right of centerline, up to 15' AGL/694' MSL. Trees beginning 1828' from DER, 829' left of centerline, up to 72' AGL/741' MSL. **Rwy 26**, vehicles on road beginning 86' from DER, 517' left of centerline, up to 15' AGL/714' MSL. pole 805' from DER, 475' left of centerline, 35' AGL/734' MSL. trees 1056' from DER, 468' left of centerline, up to 41' AGL/740' MSL.

HOUGHTON LAKE, MI

ROSCOMMON COUNTY-BLODGETT

MEMORIAL (HTL)

AMDT 1 07298 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 200-1¼, or std. w/ min. climb of 237' per NM to 1400. **Rwys 18,36**, NA-ATC.

DEPARTURE PROCEDURE: **Rwy 27**, climb heading 274° to 2600 before turning south.

NOTE: **Rwy 9**, multiple trees beginning 2330' from departure end of runway, on centerline, up to 71' AGL/1216' MSL. Multiple trees beginning 5927' from departure end of runway 275' left of centerline, up to 100' AGL/1299' MSL. Terrain beginning 31' from departure end of runway, 215' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 43' from departure end of runway, 84' left of centerline, up to 0' AGL/1162' MSL. **Rwy 27**, multiple trees beginning 791' from departure end of runway, on centerline, up to 90' AGL/1239' MSL. Fence and road beginning 323' from departure end of runway, on centerline, up to 15' AGL/1164' MSL. Terrain beginning 100' from departure end of runway, 171' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 112' from departure end of runway, 128' left of centerline, up to 0' AGL/1162' MSL.

HOWELL, MI

LIVINGSTON COUNTY SPENCER J. HARDY

(OZW)

AMDT 33 06215 (FAA)

NOTE: **Rwy 31**, multiple trees and light pole beginning 138' from departure end of runway, 334' right of centerline, up to 88' AGL/1030' MSL. Multiple trees beginning 914' from departure end of runway, 483' left of centerline, up to 83' AGL/1012' MSL. **Rwy 13**, tree 1776' from departure end of runway, 696' right of centerline, 70' AGL/1009' MSL.

IONIA, MI

IONIA COUNTY (Y70)

ORIG 83230 (FAA)

DEPARTURE PROCEDURE: **Rwys 9,18,27,36**, climb runway heading to 1400 before turning.

IRON MOUNTAIN-KINGSFORD, MI

FORD (IMT)

AMDT 5 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. w/ min. climb of 590' per NM to 1400. **Rwy 31**, 300-1¼ or std. w/ min. climb of 260' per NM to 1400.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before turning right. **Rwy 13**, climb heading 134° to 1900 before turning left.

NOTE: **Rwy 1**, trees and bushes beginning 526' from DER, 292' right of centerline, up to 79' AGL/1259' MSL. Antenna, trees and bushes beginning 378' from DER, 192' left of centerline, up to 76' AGL/1276' MSL. **Rwy 13**, tree 1276' from DER, 312' right of centerline, 88' AGL/1188' MSL. Trees and poles beginning 547' from DER, 100' left of centerline, up to 86' AGL/1306' MSL. **Rwy 19**, trees beginning 992' from DER, 245' right of centerline, up to 56' AGL/1192' MSL. Trees beginning 1229' from DER, 376' left of centerline, up to 48' AGL/1183' MSL. **Rwy 31**, trees 1711' from DER, 113' right of centerline, 66' AGL/1186' MSL. Bush 165' from DER, 161' right of centerline, 11' AGL/1131' MSL. Trees beginning 66' from DER, 182' left of centerline, up to 95' AGL/1315' MSL.

IRONWOOD, MI

GOGEBIC-IRON COUNTY (IWD)

AMDT 6 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 090° to 2300 before turning right. **Rwy 27**, climb heading 270° to 1700 before turning left.

NOTE: **Rwy 9**, trees beginning 61' from DER, 544' left of centerline, up to 31' AGL/1244' MSL. Tree 1853' from DER, 972' left of centerline, 100' AGL/1346' MSL. **Rwy 27**, vehicle on road 287' from DER, 2' right of centerline, 15' AGL/1237' MSL. Tree 1946' from DER, 952' right of centerline, 69' AGL/1283' MSL. Tree 2817' from DER, 588' left of centerline, 74' AGL/1304' MSL.

JACKSON, MI

JACKSON COUNTY-REYNOLDS FIELD (JXN)
AMDT 5 09295 (FAA)

NOTE: **Rwy 6**, antenna 3131' from DER, 1331' left of centerline, 75' AGL/1075' MSL. **Rwy 14**, tank 2617' from DER, 373' left of centerline, 107' AGL/1107' MSL. Antenna 3102' from DER, 597' left of centerline, 111' AGL/1111' MSL. Trees beginning 1137' from DER, 8' left of centerline, up to 84' AGL/1083' MSL. Trees and poles beginning 518' from DER, 13' right of centerline, up to 114' AGL/1113' MSL. Road plus vehicle 541' from DER, 245' right of centerline, 15' AGL/1015' MSL. **Rwy 24**, trees and poles beginning 367' from DER, 48' left of centerline, up to 80' AGL/1079' MSL. Buildings beginning 125' from DER, 372' left of centerline, 23' AGL/1022' MSL. Fence beginning 88' from DER, 242' right of centerline, 10' AGL/1002' MSL. Road plus vehicle 306' from DER, 3' right of centerline, 15' AGL/1007' MSL. Trees beginning 1231' from DER, 232' right of centerline, up to 62' AGL/1051' MSL. Localizer obstruction light 140' from DER, on centerline, 10' AGL/999' MSL. **Rwy 32**, trees and poles beginning 169' from DER, 69' left of centerline, up to 104' AGL/1093' MSL. Fence beginning 475' from DER, 148' left of centerline, up to 10' AGL/985' MSL. Trees beginning 94' from DER, 5' right of centerline, up to 103' AGL/1092' MSL. Fence beginning 278' from DER, 367' right of centerline, up to 10' AGL/999' MSL.

KALAMAZOO, MI

KALAMAZOO/BATTLE CREEK INTL (AZO)
AMDT 9 07242 (FAA)

NOTE: **Rwy 5**, light pole 906' from departure end of runway, 511' left of centerline, 25' AGL/879' MSL. Multiple trees beginning 1433' from departure end of runway, 90' left of centerline, up to 65' AGL/914' MSL. Multiple towers beginning 2399' from departure end of runway, 331' right of centerline, up to 119' AGL/970' MSL. Multiple trees beginning 156' from departure end of runway, 163' right of centerline, up to 78' AGL/917' MSL. **Rwy 9**, multiple trees beginning 588' from departure end of runway, on centerline, up to 104' AGL/958' MSL. Antenna 2187' from departure end of runway, 222' right of centerline, 69' AGL/928' MSL. Tree 677' from departure end of runway, 214' right of centerline, 45' AGL/899' MSL. **Rwy 17**, railroad 587' from departure end of runway, 613' left of centerline, 17' AGL/885' MSL. Tree 691' from departure end of runway, 583' right of centerline, 57' AGL/894' MSL. **Rwy 23**, multiple trees beginning 937' from departure end of runway, 50' left of centerline, up to 72' AGL/956' MSL. Multiple poles and hangar beginning 22' from departure end of runway, 331' right of centerline, up to 24' AGL/905' MSL. Multiple trees beginning 943' from departure end of runway, 144' right of centerline, up to 107' AGL/986' MSL. **Rwy 27**, road 543' from departure end of runway, on centerline, 15' AGL/890' MSL. Multiple trees beginning 414' from departure end of runway, 292' left of centerline, up to 23' AGL/972' MSL. Multiple light poles and towers beginning 521' from departure end of runway, 18' right of centerline, up to 180' AGL/1015' MSL. Multiple trees beginning 1012' from departure end of runway, 23' right of centerline, up to 75' AGL/969' MSL. **Rwy 35**, multiple trees beginning 2319' from departure end of runway, 163' left of centerline, up to 75' AGL/934' MSL. Multiple trees beginning 1961' from departure end of runway, 753' right of centerline, up to 77' AGL/936' MSL.

LAKEVIEW, MI

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)
ORIG 98281 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1 or std. with a min. climb of 400' per NM to 1200.

NOTE: **Rwy 9**, 1018' tree 50' from departure end of runway, 490' right of centerline.

LAMBERTVILLE, MI

TOLEDO SUBURBAN (DUH)
AMDT 1 80360 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

LANSING, MI

CAPITAL REGION INTL (LAN)
AMDT 13 93147 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 10L, 24, 28R**, 300-1.

DEPARTURE PROCEDURE: **Rwys 10L, 10R**, climb runway heading to 2000 before turning south.

Rwys 6, 24, 28L, 28R, climb runway heading to 1500 before turning southeast.

LAPEER, MI

DUPONT-LAPEER (D95)
AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

LINDEN, MI

PRICE'S (9G2)
AMDT 4 98085 (FAA)
TAKE-OFF MINIMUMS: **Rwy 36**, NA.

LUDINGTON, MI

MASON COUNTY (LDM)
AMDT 6 92233 (FAA)
TAKE-OFF MINIMUMS: **Rwys 1, 19, 26**, 300-1.

MACKINAC ISLAND, MI

MACKINAC ISLAND (MCD)
AMDT 1 80164 (FAA)
DEPARTURE PROCEDURE: **Rwy 8**, climb runway heading to 1100 before turning right.

MARQUETTE, MI

SAWYER INTL (SAW)
ORIG 10098 (FAA)
NOTE: **Rwy 19**, trees beginning 2582' from DER, left and right of centerline, up to 100' AGL/1269' MSL.

MASON, MI

MASON JEWETT FIELD (TEW)
AMDT 2A 10154 (FAA)
NOTE: **Rwy 10**, trees, pole, and vehicle on road beginning 109' from DER, 57' right of centerline, up to 100' AGL/1023' MSL. Poles and vehicles on road 276' from DER, 245' left of centerline, up to 35' AGL/944' MSL.

MENOMINEE, MI

MENOMINEE-MARINETTE TWIN COUNTY
(MNM)

AMDT 3 09239 (FAA)

NOTE: **Rwy 3**, trees and bush beginning 196' from DER, 340' left of centerline, up to 100' AGL/719' MSL.

Multiple trees beginning 1568' from DER, 702' right of centerline, up to 100' AGL/759' MSL. **Rwy 14**, multiple trees, poles, and building beginning 451' from DER, 85' left of centerline, up to 135' AGL/735' MSL. Multiple trees and pole beginning 651' from DER, 171' right of centerline, up to 100' AGL/704' MSL. **Rwy 21**, multiple trees beginning 932' from DER, 469' left of centerline, up to 77' AGL/677' MSL. Multiple trees beginning 1808' from DER, 701' right of centerline, up to 65' AGL/685' MSL. **Rwy 32**, multiple trees beginning 64' from DER, 71' left of centerline, up to 100' AGL/739' MSL. Multiple trees beginning 875' from DER, 15' right of centerline, up to 100' AGL/759' MSL.

MILAND, MI

JACK BARSTOW (IKW)

ORIG 09183 (FAA)

NOTE: **Rwy 6**, trees beginning 56' from DER, 493' right of centerline, up to 25' AGL/655' MSL. Trees beginning 920' from DER, 47' left of centerline, up to 20' AGL/660' MSL. Trees beginning 1144' from DER, from right to left of centerline, up to 100' AGL/754' MSL. Pole 1495' from DER, 331' right of centerline, 37' AGL/672' MSL.

Rwy 18, trees beginning 339' from DER, 279' left of centerline, up to 100' AGL/729' MSL. Trees beginning 358' from DER, 306' right of centerline, up to 100' AGL/724' MSL. **Rwy 24**, vehicles on road beginning 225' from DER, from right to left of centerline, up to 15' AGL/634' MSL. Trees beginning 510' from DER, 103' right of centerline, up to 100' AGL/710' MSL. Trees beginning 787' from DER, 152' left of centerline, up to 100' AGL/709' MSL. **Rwy 36**, trees beginning 105' from DER, 200' right of centerline, up to 100' AGL/744' MSL. Trees beginning 147' from DER, 242' left of centerline, up to 100' AGL/729' MSL.

MENOMINEE, MI

CUSTER (TTF)

AMDT 6 08213

NOTE: **Rwy 21**, Trees and light poles beginning 81' from departure end of runway, 9' right of centerline, up to 122' AGL/736' MSL. Trees and light poles beginning 243' from departure end of runway, 218' left of centerline, up to 98' AGL/707' MSL. Road and vehicle beginning 1954' from departure end of runway, on centerline, 15' AGL/626' MSL.

MOUNT PLEASANT, MI

MOUNT PLEASANT MUNI (MOP)

AMDT 5 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 23**, NA-Environmental.

NOTE: **Rwy 9**, trees beginning 420' from DER, 512' right of centerline, up to 86' AGL/845' MSL. Trees beginning 420' from DER, 266' left of centerline, up to 23' AGL/836' MSL. **Rwy 27**, trees beginning 1115' from DER, 39' right of centerline, up to 99' AGL/858' MSL. Trees beginning 1025' from DER, 3' left of centerline, up to 108' AGL/867' MSL.

MUSKEGON, MI

MUSKEGON COUNTY (MKG)

AMDT 10 09015 (FAA)

NOTE: **Rwy 6**, tree 1700' from departure end of runway, 600' right of centerline, 25' AGL/672' MSL. Multiple trees beginning 1980' from departure end of runway, 300' left of centerline, up to 75' AGL/709' MSL. **Rwy 14**, pole 1040' from departure end of runway, 700' left of centerline, 25' AGL/655' MSL. Multiple poles beginning 1500' from departure end of runway, 880' right of centerline, up to 50' AGL/677' MSL. Tree 1900' from departure end of runway, 940' left of centerline, 79' AGL/709' MSL. **Rwy 24**, bush 124' from departure end of runway, 480' left of centerline, 19' AGL/630' MSL. Tree 500' from departure end of runway, 300' right of centerline, 42' AGL/649' MSL. Tree 1210' from departure end of runway, 450' left of centerline, 42' AGL/653' MSL. Antenna 1220' from departure end of runway, 500' right of centerline, 43' AGL/654' MSL. Multiple trees beginning 2200' from departure end of runway, 50' left of centerline, up to 86' AGL/697' MSL. **Rwy 32**, tree 1040' from departure end of runway, 740' right of centerline, 65' AGL/659' MSL. Tree 1190' from departure end of runway, 500' left of centerline, 65' AGL/663' MSL. Tree 1270' from departure end of runway, 800' left of centerline, 89' AGL/690' MSL.

NEW HUDSON, MI

OAKLAND SOUTHWEST (Y47)

AMDT 2 88350 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25**, 300-1.

NEWBERRY, MI

LUCE COUNTY (ERY)

ORIG 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, NA-Environmental.

NOTE: **Rwy 11**, trees beginning 15' from DER, 112' right of centerline, up to 79' AGL/919' MSL. Trees beginning 1207' from DER, 10' left of centerline, up to 119' AGL, 969' MSL. **Rwy 29**, ground 1' from DER, 221' right of centerline, 0' AGL/872' MSL. Tree 1' from DER, 431' right of centerline, 12' AGL/872' MSL. Trees and antenna on building beginning 88' from DER, 13' left of centerline, up to 84' AGL/954' MSL. Trees, vehicle on road, and antenna on building beginning 561' from DER, 28' right of centerline, up to 89' AGL/959' MSL.

NILES, MI

JERRY TYLER MEMORIAL (3TR)

AMDT 5 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 14, 22, 32**, 300-1.

DEPARTURE PROCEDURE: **Rwys 4, 14**, climb runway heading to 1400 before turning. **Rwy 22**, left turn climb heading 180° to 1400 before turning. **Rwy 32**, right turn climb heading 360° to 1400 before turning.

ONTONAGON, MI

ONTONAGON COUNTY-SCHUSTER FIELD
(OGM)

AMDT 1 86072 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, 300-1.

OSCODA, MI

OSCODA-WURTHSMITH (OSC)

ORIG 08157 (FAA)

NOTE: **Rwy 6**, Trees beginning 3096' from departure end of runway, 967' left of centerline up to 100' AGL/719' MSL. **Rwy 24**, Trees beginning 2192' from departure end of runway, 578' right of centerline up to 100' AGL/739' MSL. Trees beginning 1415' from departure end of runway, 559' left of centerline, up to 100' AGL/739' MSL.

OWOSSO, MI

OWOSSO COMMUNITY (RNP)

AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 18, 24, 36**, NA - Environmental.

NOTE: **Rwy 10**, bush 187' from departure end of runway, 158' right of centerline, 3' AGL/742' MSL. Trees beginning 1136' from departure end of runway, 630' left of centerline, up to 75' AGL/814' MSL. Trees and pole beginning 1111' from departure end of runway, 596' right of centerline, up to 90' AGL/829' MSL. Powerline with towers beginning 2029' from departure end of runway, left and right of centerline, 90' AGL/829' MSL. **Rwy 28**, bush 212' from departure end of runway, 436' right of centerline, 11' AGL/741' MSL. Vent, trees, and a building beginning 266' from departure end of runway, 46' left of centerline, up to 100' AGL/836' MSL. Trees and a pole beginning 1184' from departure end of runway, 244' right of centerline, up to 60' AGL/815' MSL.

PELLSTON, MI

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

AMDT 4 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 23**, std. w/ a min. climb of 260' per NM to 1800, or 1000-2% for climb in visual conditions. **Rwy 32**, std. w/ a min. climb of 290' per NM to 1100, or 1000-2% for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 23, 32**, for climb in visual conditions: cross Pellston Rgnl airport of Emmet County at or above 1600.

NOTE: **Rwy 5**, vehicle on road 411' from DER, 588' left of centerline, 15' AGL/738' MSL. Trees beginning 1070' from DER, 12' left of centerline, up to 100' AGL/838' MSL. Railroad 810' from DER, 672' right of centerline, 23' AGL/744' MSL. Trees beginning 1001' from DER, 288' right of centerline, up to 100' AGL/821' MSL.

Rwy 14, trees beginning 1290' from DER, 814' left of centerline, up to 100' AGL/805' MSL. **Rwy 23**, vehicle on road 14' from DER, 463' left of centerline, 15' AGL/720' MSL. Trees beginning 476' from DER, 53' left of centerline, up to 100' AGL/805' MSL. Trees beginning 953' from DER, 240' right of centerline, up to 100' AGL/820' MSL. Tree 2.97 NM from DER, 2771' right of centerline, 100' AGL/1297' MSL. **Rwy 32**, bush 107' from DER, 309' right of centerline, 4' AGL/722' MSL. Vehicle on road 1213' from DER, 809' right of centerline, 15' AGL/752' MSL. Terrain 2127' from DER, 715' right of centerline, 775' MSL. Trees beginning 4336' from DER, 315' right of centerline, up to 100' AGL/872' MSL. Trees beginning 1932' from DER, 20' left of centerline, up to 100' AGL/996' MSL.

PLYMOUTH, MI

CANTON-PLYMOUTH-METTETAL (1D2)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.**PONTIAC, MI**

OAKLAND COUNTY INTL (PTK)

AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, NA-Environmental. NOTE: **Rwy 9L**, hangars beginning 203' from DER, 511' left of centerline, up to 30' AGL/1000' MSL. **Rwy 9R**, multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Antenna on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL. **Rwy 27L**, trees 452' from DER, 331' right of centerline, 23' AGL/1002' MSL. Vehicle on road 388' from DER, 15' right of centerline, 15' AGL/992' MSL. Multiple trees beginning 449' from DER, 60' left of centerline, up to 76' AGL/1046' MSL. **Rwy 27R**, multiple trees beginning 451' from DER, 2' right of centerline, up to 62' AGL/1041' MSL. Vehicle on road 416' from DER, 24' right of centerline, 15' AGL/992' MSL. Multiple trees beginning 387' from DER, 19' left of centerline, up to 36' AGL/1015' MSL.

PORT HURON, MI

ST. CLAIR COUNTY INTL (PHN)

AMDT 5 96060 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 10, 28**, 300-1.**ROGERS CITY, MI**

PRESQUE ISLE COUNTY (PZQ)

AMDT 1 86268 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.**ROMEO, MI**

ROMEO STATE (D98)

AMDT 4 08101 (FAA)

NOTE: **Rwy 18**, Vehicle on roadway 364' from departure end of runway, on centerline, 15' AGL/744' MSL. Trees beginning 1360' from departure end of runway, 854' left of centerline, up to 100' AGL/825' MSL. **Rwy 36**, Vehicle on roadway 579' from departure end of runway, on centerline, 15' AGL/759' MSL. Trees beginning 955' from departure end of runway, left and right of centerline, up to 100' AGL/845' MSL.

SAGINAW, MI

MBS INTL (MBS)

ORIG 86240 (FAA)

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 1100 before turning.

SAGINAW COUNTY H.W. BROWNE (HYX)

AMDT 7 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 400-1.

DEPARTURE PROCEDURE: **Rwy 9**, climb runway heading to 2100 before turning North. **Rwys 23, 27**, climb runway heading to 2100 before turning Northeast. **Rwy 5**, right turn climb heading 090° to 2100 before turning North.

SAULT STE MARIE, MI

CHIPPEWA COUNTY INTL (CIU)

ORIG 09295 (FAA)

NOTE: **Rwy 9**, buildings beginning 453' from DER, 519' right of centerline, up to 30' AGL/829' MSL. Building 723' from DER, 461' left of centerline, up to 30' AGL/829' MSL. Trees beginning 1838' from DER, 23' right of centerline, up to 100' AGL/899' MSL.

Rwy 16, trees beginning 3645' from DER, extending from 1018' right of centerline to 1221' left of centerline, up to 100' AGL/899' MSL. **Rwy 27**, vehicle on road, 412' from DER, 510' left of centerline, up to 15' AGL/804' MSL. Trees beginning 520' from DER, extending from 581' left of centerline to 827' right of centerline, up to 100' AGL/879' MSL.

SELFRIDGE ANGB (KMTC)

MT. CLEMENS, MIAMDT 1, 09015

Rwy 19***Rwy 1, 300-1½****

* Standard with a CG of 260'/NM to 1600.

** Or standard with CG of 280'/NM to 1000.

DEPARTURE PROCEDURE: **Rwy 19**, For climb in visual conditions: Ceiling 1300'/Visibility 2½ SM, remain within 5.6 NM of KMTC airport, cross KMTC airport at or above 1700 before proceeding on course. Max airspeed 250 KIAS.

Rwy 1, Standard with minimum climb of 280'/NM to 1000 or 300-1½.

TAKE-OFF OBSTACLES: **Rwy 19**: Power poles 2274' from DER 38' right of centerline, 36' AGL/616' MSL. Trees 3310' from DER 929' right of centerline, 80' AGL/660' MSL. **Rwy 1**: Rising terrain 6' out to 237' from DER beginning 500' out to 563' left of centerline, up to 585' MSL (up to 6' above Thr). Fence from 68' out to 220' from DER beginning 341' to 523' right of centerline, 10' AGL/595' MSL. Trees starting 3043' out to 3099' from DER beginning 451' to 927' right of centerline, 80' AGL/660' MSL. Trees starting 2334' out to 3059' from DER beginning 1057' to 1105' left of centerline, 80' AGL/660' MSL. Vehicle 1560' from DER 427' left of centerline, 15' AGL/600' MSL. West bracket reflector 997' from DER 226' left of centerline, 15' AGL/592' MSL.

SOUTH HAVEN, MI

SOUTH HAVEN AREA RGNL (LWA)

AMDT 2 91234 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 14, 32**, 300-1.**SPARTA, MI**

PAUL C. MILLER-SPARTA (8D4)

AMDT 2 10126 (FAA)

NOTE: **Rwy 7**, multiple trees beginning 564' from DER, 105' right of centerline, up to 97' AGL/827' MSL. Tree 782' from DER, 379' left of centerline, 47' AGL/784' MSL.

Rwy 25, multiple trees beginning 507' from DER, 47' right of centerline, up to 81' AGL/841' MSL. Tree 117' from DER, 218' left of centerline, 47' AGL/817' MSL. Tree 656' from DER, 464' left of centerline, 67' AGL/822' MSL.

STURGIS, MI

KIRSCH MUNI (IRS)

AMDT 2 96256 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6, 24**, 300-1.**TECUMSEH, MI**

MEYERS-DIVER'S (3TE)

AMDT 2 96004 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 300-1.**TRAVERSE CITY, MI**

CHERRY CAPITAL (TVC)

AMDT 9 98169 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.

Rwy 28, 700-2 or std. with min. climb of 300' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 10, 18, 36**, climb runway heading to 2000 before proceeding on course.

Rwy 28, climbing left turn heading 240° to 2000 before proceeding on course.

TROY, MI

OAKLAND/TROY (VLL)

AMDT 3 92289 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1.

DEPARTURE PROCEDURE: **Rwys 9, 27**, climb runway heading to 1200 before turning.

WEST BRANCH, MI

WEST BRANCH COMMUNITY (Y31)

AMDT 2 97086 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 500-2.

ABRAMS MUNI (See GRAND LEDGE)

ADRIAN N41°52.20' W84°04.65' NOTAM FILE ADG.
NDB (MHW) 278 ADG at Lenawee Co. Unmonitored.

DETROIT
L-28J

ADRIAN

LENAAWEE CO (ADG) 3 SW UTC-5(-4DT) N41°52.06' W84°04.64'

798 B S4 FUEL 100LL, JET A NOTAM FILE ADG

RWY 05-23: H5001X100 (ASPH) S-20 HIRL

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 32'. P-line.

RWY 23: PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 11-29: 1810X150 (TURF)

RWY 11: Trees. RWY 29: Trees.

AIRPORT REMARKS: Attended 1300Z†-dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-265-2827, arpt manager nghts 517-442-8934. 24 hr self serve fuel (100LL only) with credit card. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. HIRL Rwy 05-23 preset low ints; to increase ints and ACTIVATE PAPI Rwy 05 and Rwy 23—CTAF. Ldg fee for commercial acft waived with fuel purchase.

WEATHER DATA SOURCES: ASOS 118.375 (517) 265-9089.

COMMUNICATIONS: CTAF/UNICOM 122.8

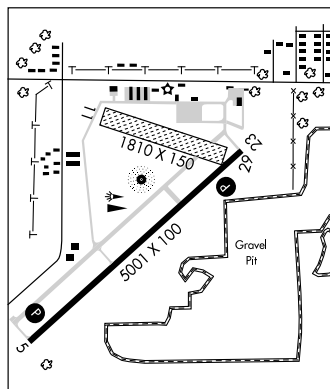
Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

JACKSON (L) VORW/DME 109.6 JXN Chan 33 N42°15.55'

W84°27.51' 149° 29 NM to fld. 995/5W.

ADRIAN NDB (MHW) 278 ADG N41°52.20' W84°04.65' at fld. NOTAM FILE ADG. Unmonitored.



DETROIT
COPTER
H-106, L-28J
IAP

AERONUT PARK BALLOONPORT (See HOWELL)**ALBERT J LINDBERG** (See HESSEL)**ALLEGAN**

PADGHAM FLD (35D) 1 E UTC-5(-4DT) N42°31.83' W85°49.42'

706 B S4 FUEL 100LL NOTAM FILE LAN

RWY 11-29: H4300X75 (ASPH) S-18 MIRL

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 15-33: 1598X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

AIRPORT REMARKS: Attended 1300Z†-dusk. Parachute Jumping. Rwy 15-33 surface rough. Rwy 15 marked with 3' yellow cones. ACTIVATE MIRL Rwy 11-29, PAPI Rwy 11 and Rwy 29, REIL Rwy 29—CTAF. Rwy 11-29 parallel twy marked with reflectors.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

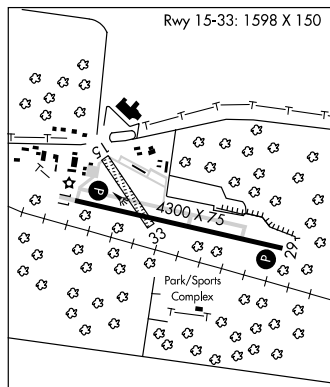
Ⓡ GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 073° 13.1 NM to fld. 640/OE.



CHICAGO
L-28J
IAP

ALMA N43°19.40' W84°47.18' NOTAM FILE AMN.

NDB (MHW) 329 AMN 096° 4.3 NM to Gratiot Community.

DETROIT
L-28J

ADG NDB 278	APP CRS 042°	Rwy Idg TDZE Apt Elev	5001 798 798
-----------------------	------------------------	-----------------------------	---

NDB RWY 5

ADRIAN / LENAWEE COUNTY (ADG)



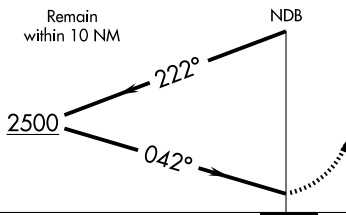
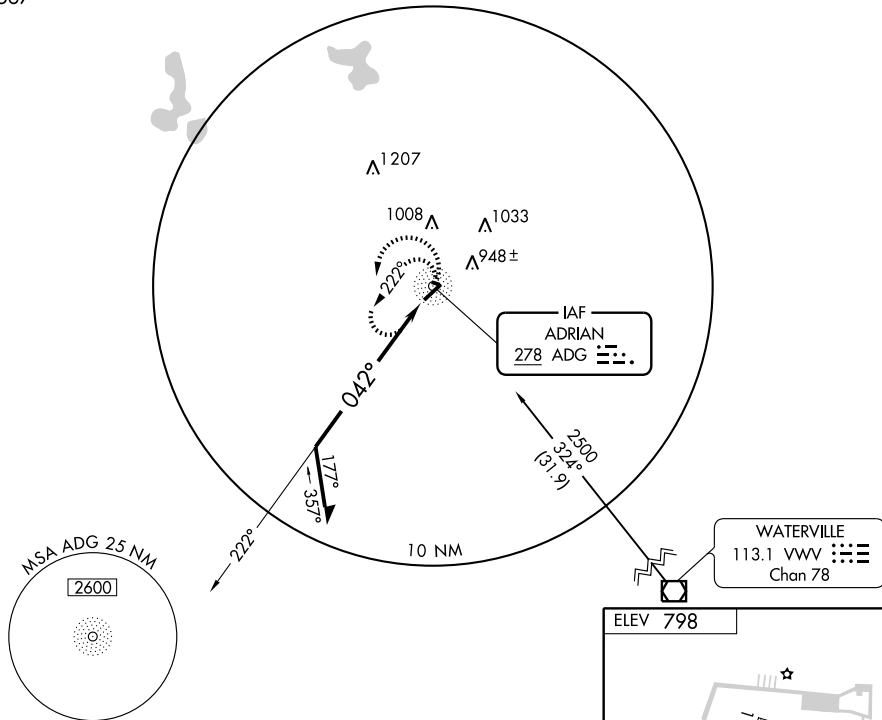
MISSED APPROACH: Climbing left turn to
2500 in ADG NDB holding pattern.

ASOS
118.375

TOLEDO APP CON
134.35 317.55

UNICOM
122.8 (CTAF) 0

A 1567

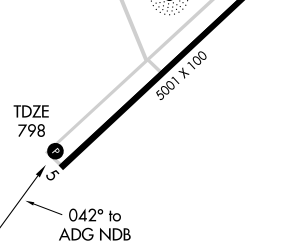


2500



278

ELEV 798



HIRL Rwy 5-23 0

CATEGORY	A	B	C	D
S-5	1380-1	582 (600-1)	1380-1½ 582 (600-1½)	1380-1¾ 582 (600-1¾)
CIRCLING	1380-1	582 (600-1)	1380-1½ 582 (600-1½)	1380-2 582 (600-2)

Knots	60	90	120	150	180
Min:Sec					

WAAS CH 42603 W05A	APP CRS 053°	Rwy Idg TDZE Apt Elev	5001 798 798
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 5

ADRIAN / LENAWEE COUNTY (ADG)

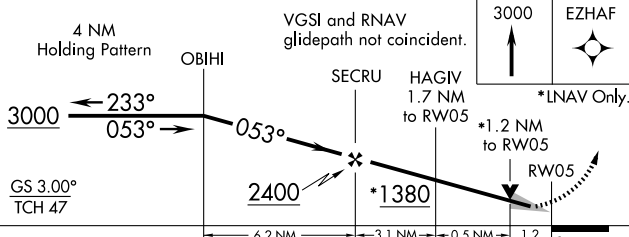
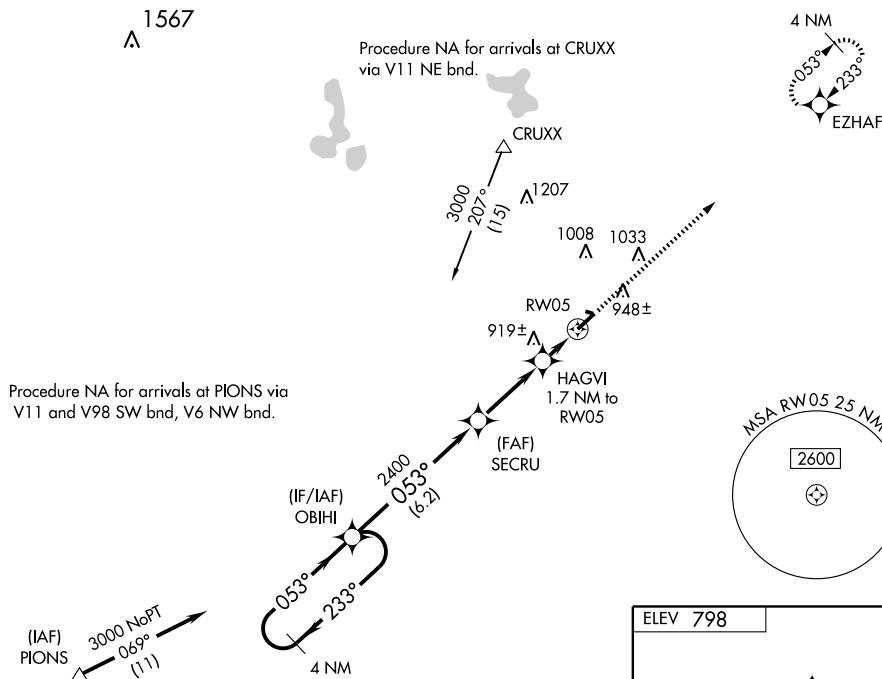
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Ann Arbor Muni altimeter setting and increase all DAs 66 ft and all MDAs 80 ft, and increase LPV all Cats, LNAV Cat D and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Ann Arbor Muni altimeter setting.

MISSED APPROACH: Climb to 3000 direct EZHAF and hold.

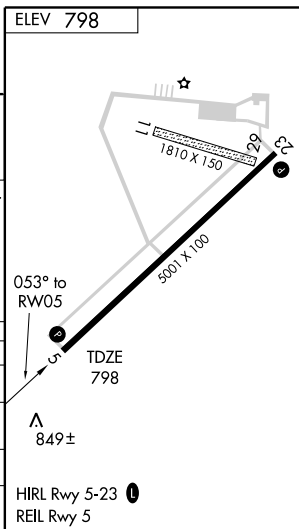
ASOS
118.375

TOLEDO APP CON
134.35 317.55

UNICOM
122.8 (CTAF) **0**



CATEGORY	A	B	C	D
LPV DA	1048-¾	250 (300-¾)		
LNAV/ DA VNAV	1119-1¼	321 (400-1¼)		
LNAV MDA	1200-1 402 (500-1)	1200-1¼ 402 (500-1¼)		
CIRCLING	1300-1 502 (600-1)	1320-1 522 (600-1)	1320-1½ 522 (600-1½)	1380-2 582 (600-2)



APP CRS 233°	Rwy Idg TDZE Apt Elev	5001 798 798
------------------------	-----------------------------	---

RNAV (GPS) RWY 23

ADRIAN / LENAWEE COUNTY (ADG)



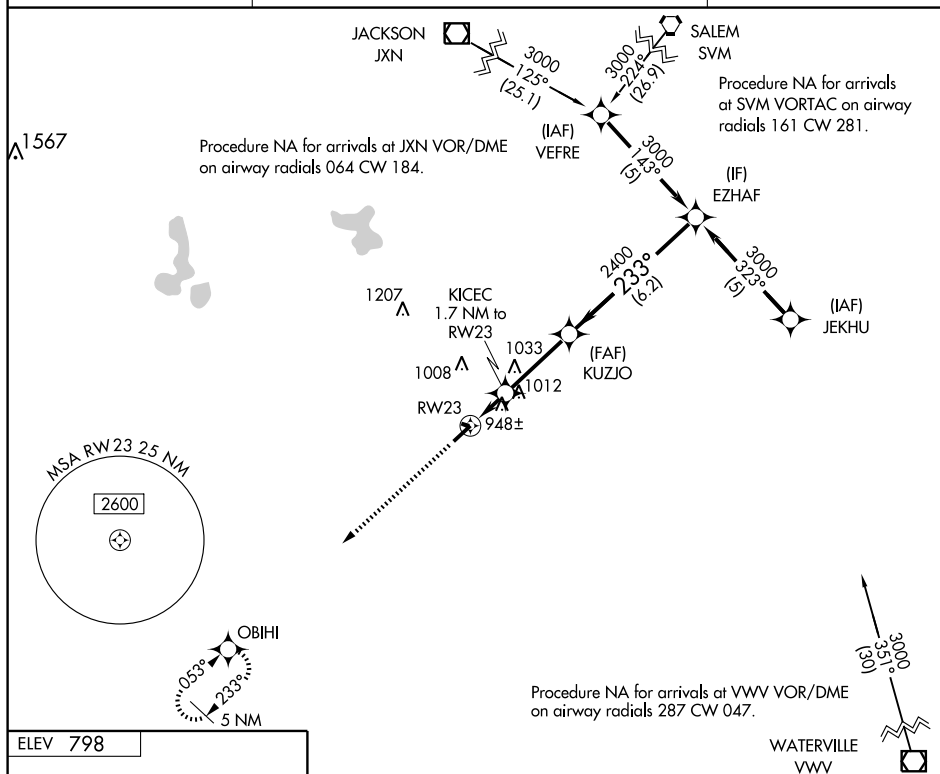
If local altimeter setting not received, use Ann Arbor Muni altimeter setting and increase all MDAs 80 feet.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000
direct OBIHI and hold.

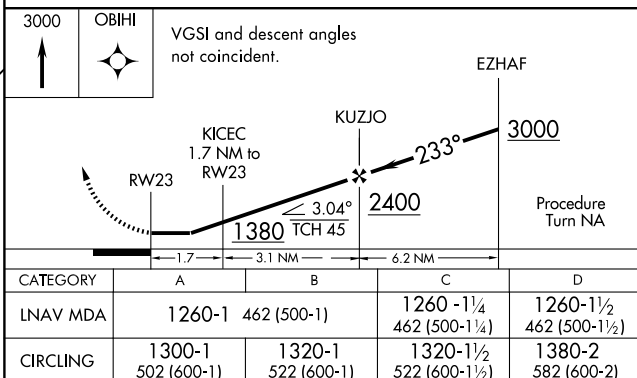
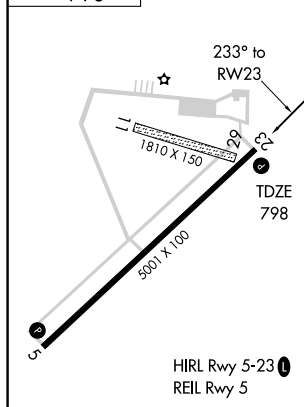
ASOS
118.375

TOLEDO APP CON
134.35 317.55

UNICOM
122.8 (CTAF) 0



ELEV 798



ABRAMS MUNI (See GRAND LEDGE)

ADRIAN N41°52.20' W84°04.65' NOTAM FILE ADG.
NDB (MHW) 278 ADG at Lenawee Co. Unmonitored.

DETROIT
L-28J

ADRIAN

LENAAWEE CO (ADG) 3 SW UTC-5(-4DT) N41°52.06' W84°04.64'

798 B S4 FUEL 100LL, JET A NOTAM FILE ADG

RWY 05-23: H5001X100 (ASPH) S-20 HIRL

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 32'. P-line.

RWY 23: PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 11-29: 1810X150 (TURF)

RWY 11: Trees. RWY 29: Trees.

AIRPORT REMARKS: Attended 1300Z†-dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-265-2827, arpt manager nghts 517-442-8934. 24 hr self serve fuel (100LL only) with credit card. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. HIRL Rwy 05-23 preset low ints; to increase ints and ACTIVATE PAPI Rwy 05 and Rwy 23—CTAF. Ldg fee for commercial acft waived with fuel purchase.

WEATHER DATA SOURCES: ASOS 118.375 (517) 265-9089.

COMMUNICATIONS: CTAF/UNICOM 122.8

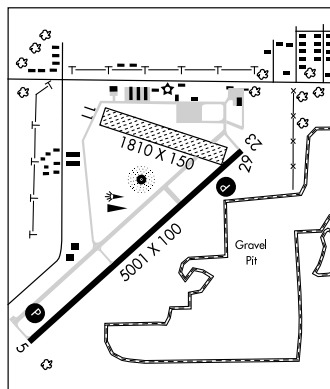
Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

JACKSON (L) VORW/DME 109.6 JXN Chan 33 N42°15.55'

W84°27.51' 149° 29 NM to fld. 995/5W.

ADRIAN NDB (MHW) 278 ADG N41°52.20' W84°04.65' at fld. NOTAM FILE ADG. Unmonitored.



DETROIT
COPTER
H-106, L-28J
IAP

AERONUT PARK BALLOONPORT (See HOWELL)**ALBERT J LINDBERG** (See HESSEL)**ALLEGAN**

PADGHAM FLD (35D) 1 E UTC-5(-4DT) N42°31.83' W85°49.42'

706 B S4 FUEL 100LL NOTAM FILE LAN

RWY 11-29: H4300X75 (ASPH) S-18 MIRL

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 15-33: 1598X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

AIRPORT REMARKS: Attended 1300Z†-dusk. Parachute Jumping. Rwy 15-33 surface rough. Rwy 15 marked with 3' yellow cones. ACTIVATE MIRL Rwy 11-29, PAPI Rwy 11 and Rwy 29, REIL Rwy 29—CTAF. Rwy 11-29 parallel twy marked with reflectors.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

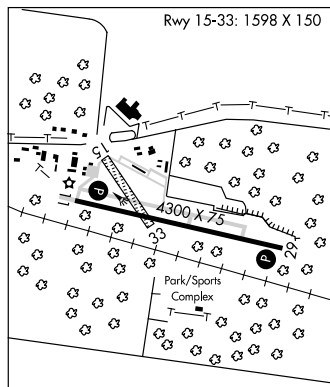
Ⓡ GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 073° 13.1 NM to fld. 640/OE.



CHICAGO
L-28J
IAP

ALMA N43°19.40' W84°47.18' NOTAM FILE AMN.

NDB (MHW) 329 AMN 096° 4.3 NM to Gratiot Community.

DETROIT
L-28J

APP CRS 103°	Rwy ldg 4300
	TDZE 706
	Apt Elev 706

RNAV (GPS) RWY 11

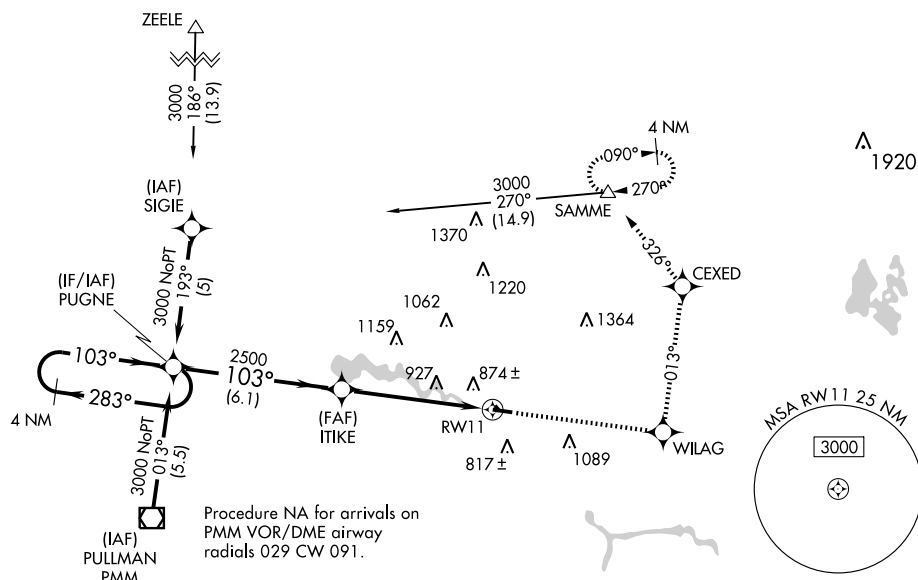
ALLEGAN / PADGHAM FIELD (35D)

<p>▼ ▲ NA</p>	<p>DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Holland alimeter setting, when not received use Grand Rapids alimeter setting and increase all MDA 40 feet, increase Circling Cat C visibility ¼ mile.</p>	<p>MISSED APPROACH: Climb to 3000 direct WILAG and left turn on track 013° to CEXED and on track 326° to SAMME and hold.</p>
---------------------------------	---	--

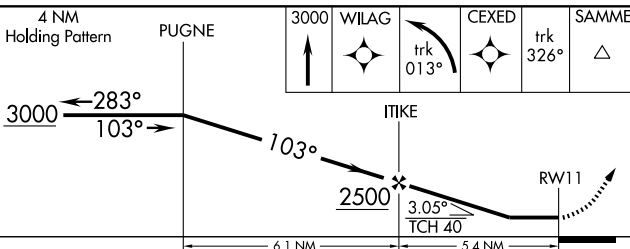
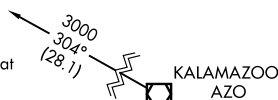
HOLLAND ASOS
119.025

GRAND RAPIDS APP CON★
128.4 257.6

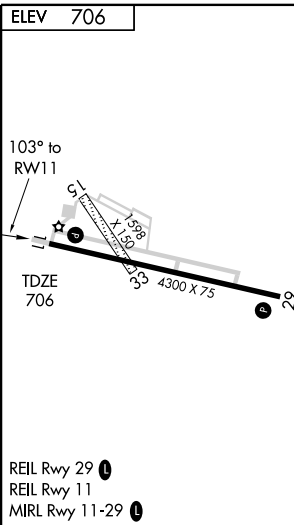
UNICOM
122.8 (CTAF) 0



Procedure NA for arrivals at AZO VOR/DME via V116 Eastbound.



CATEGORY	A	B	C	D
LNAV MDA	1220-1 514 (600-1)	1220-1½ 514 (600-1½)	1220-1½ 514 (600-1½)	NA
CIRCLING	1280-1 574 (600-1)	1280-1½ 574 (600-1½)	1280-1½ 574 (600-1½)	NA



APP CRS **283°**
 Rwy ldg **4300**
 TDZE **705**
 Apt Elev **706**

RNAV (GPS) RWY 29

ALLEGAN / PADGHAM FIELD (35D)



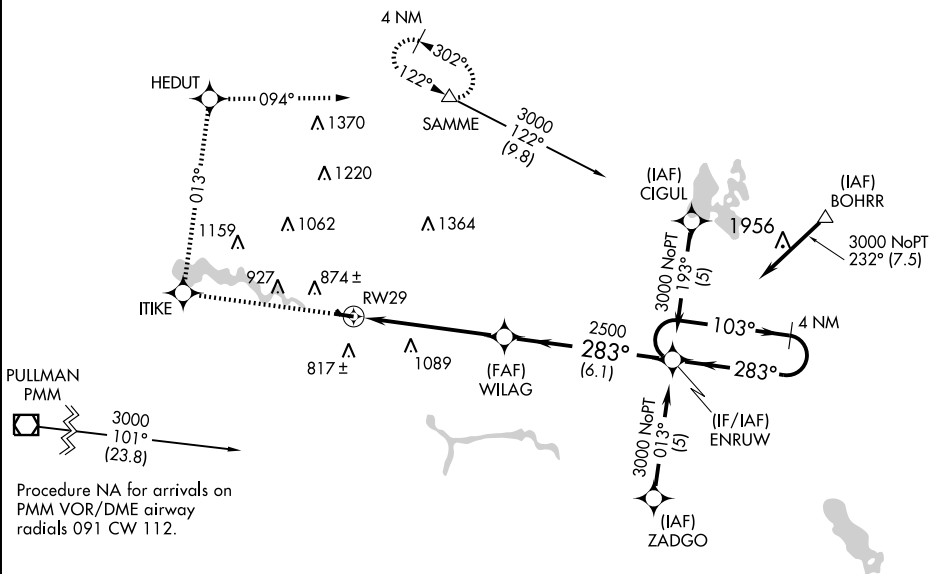
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Holland altimeter setting, when not received use Grand Rapids altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 direct ITIKE and right turn via track 013° to HEDUT and via track 094° to SAMME and hold.

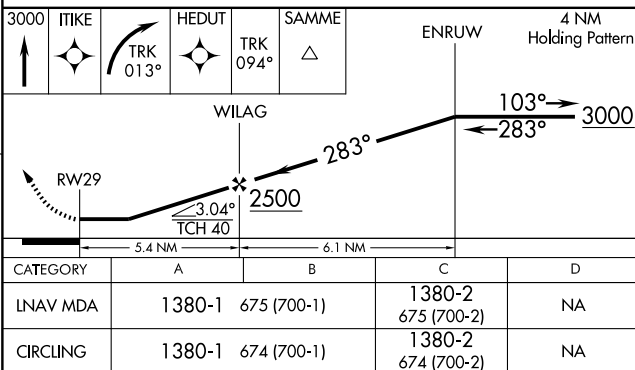
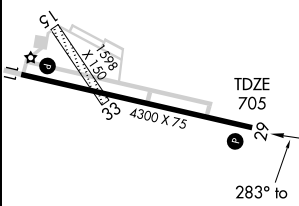
HOLLAND ASOS
119.025

GRAND RAPIDS APP CON*
128.4 257.6

UNICOM
122.8 (CTAF) 0



ELEV **706**



REIL Rwy 29 0
 REIL Rwy 11
 MRL Rwy 11-29 0

VOR/DME PMM 112.1 Chan 58	APP CRS 253°	Rwy Idg TDZE Apt Elev	4300 705 706
---	------------------------	-----------------------------	---

VOR RWY 29

ALLEGAN / PADGHAM FIELD (35D)

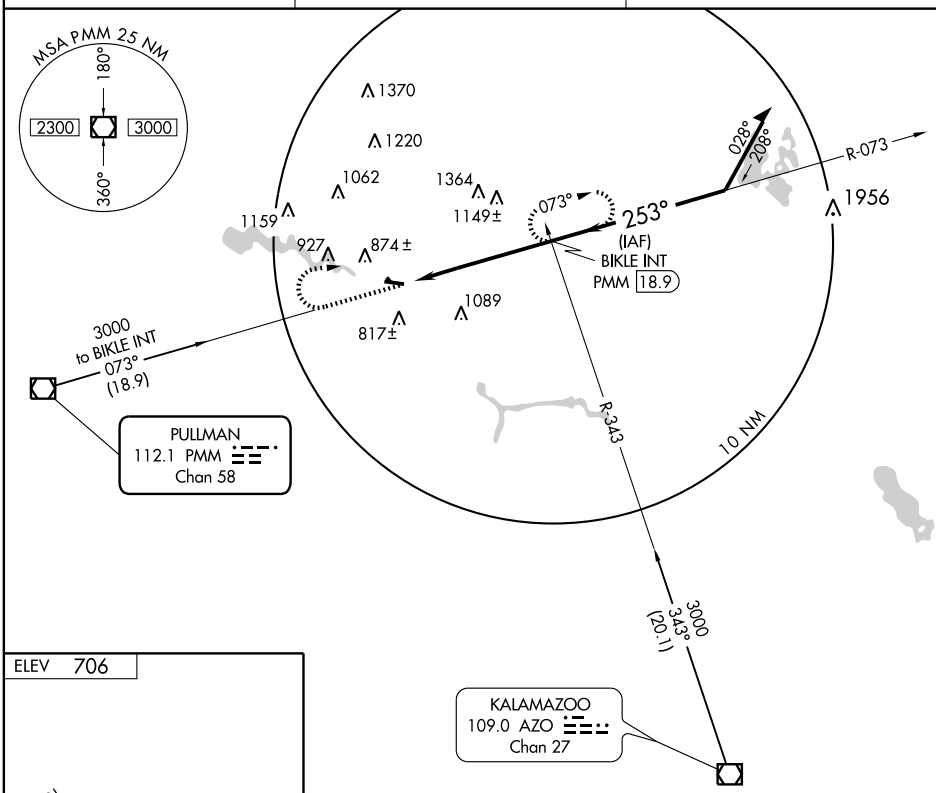
V Visibility reduction by helicopters NA. Use Holland altimeter setting, when not received use Grand Rapids altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 then right turn via PMM VOR/DME R-073 to BIKLE Int/PMM 18.9 DME and hold.

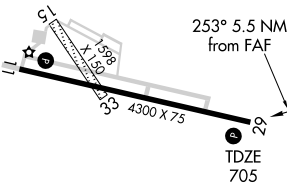
HOLLAND ASOS
119.025

GRAND RAPIDS APP CON*
128.4 257.6

UNICOM
122.8 (CTAF) 0



ELEV 706



REIL Rwy 29 **0**
REIL Rwy 11
MIRL Rwy 11-29 **0**

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

	3000	PMM R-073 112.1	BIKLE INT	BIKLE INT PMM 18.9	Remain within 10 NM
				073°	3000
				253°	2500
				3.02°	TCH 40
				5.5 NM	
CATEGORY	A	B	C	D	
S-29	1460-1 755 (800-1)	1460-1¼ 755 (800-1¼)	1460-2¼ 755 (800-2¼)	NA	
CIRCLING	1460-1 754 (800-1)	1460-1¼ 754 (800-1¼)	1460-2¼ 754 (800-2¼)	NA	

ALMA

GRATIOT COMMUNITY (AMN) 3 SW UTC-5(-4DT) N43°19.33' W84°41.28'

DETROIT

754 B S4 FUEL 100LL, JET A OX3 NOTAM FILE AMN

L-28J

RWY 09-27: H4999X75 (ASPH) S-40, D-65, 2S-82 MIRL

IAP

RWY 09: REIL. VASI(V2L)—GA 3.0° TCH 45'.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 53'.

RWY 18-36: H3197X75 (ASPH) S-26 MIRL

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2130Z†. Powered parachute activity on and invof arpt. Animals on and invof arpt. ACTIVATE MIRL Rwy 09-27 and 18-36; VASI Rwy 09 and 27; REIL Rwy 09 and 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 124.175 (989) 463-3433

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†) CLNC DEL 119.25

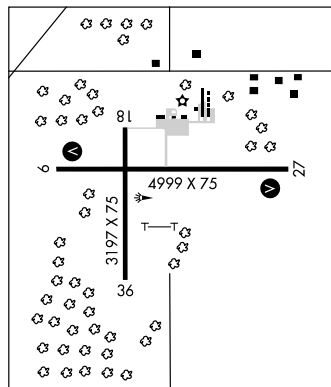
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 248° 29.5 NM to fld. 663/3W. HIWAS.

ALMA NDB (MWH) 329 AMN N43°19.40' W84°47.18' 096° 4.3 NM to fld. NOTAM FILE AMN.



ALMENA (See PAW PAW)

ALPENA

ALPENA CO RGNL (APN) 6 W UTC-5(-4DT) N45°04.69' W83°33.62'

LAKE HURON

690 B S2 FUEL 100LL, JET A LRA Class I, ARFF Index A NOTAM FILE APN

H-11A, L-31C

RWY 01-19: H9001X150 (CONC-GRVD) S-95, D-115, 2S-170, 2T-560, 2D/2D2-468 HIRL

IAP

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Tree.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Tree.

RWY 07-25: H5028X100 (CONC-GRVD) S-93, D-111, 2S-170,

2T-553, 2D/2D2-438 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 07: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

RWY 19: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 25: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

ARRESTING GEAR/SYSTEM

RWY 01 BAK 14 BAK-12A(B) (1500')

BAK 14 BAK-12A(B) (1500') RWY 19

AIRPORT REMARKS: Attended 1200-0000Z†. For svc after hrs call 989-920-7988. Birds and other wildlife on and invof arpt. Twy H, east of Rwy 01-19 clsd to military acft. Twy B not visible from twr. Twy A west of Twy C and Twy B rstd to military only. Be alert for uncontrolled vehicles on the twy. Twy to maintenance hangars unlit. 48 hrs PPR for air carrier ops with more than 30 passenger seats—call arpt manager 989-354-2907. ACTIVATE HIRL Rwy 01-19; MIRL Rwy 07-25; REIL Rwy 19, Rwy 07 and Rwy 25; and MALSR Rwy 01—CTAF. ANG-72 hr PPR; ctc Base OPS DSN 741-3226, C989-354-6226 for PPR number. ANG duty hrs Mon-Fri 1300-2130Z† except holidays.

WEATHER DATA SOURCES: ASOS 120.675 (989) 356-3662.

HIWAS 108.8 APN.

COMMUNICATIONS: CTAF 121.35 UNICOM 122.95

RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.475 (2100-1300Z†)

Ⓡ APP/DEP CON 128.425 (1300-2100Z†).

TOWER 121.35 (Weekdays 1300-2100Z† except holidays.) GND CON 121.9

AIRSPACE: CLASS D svc Weekdays 1300-2100Z† except holidays other times CLASS E.

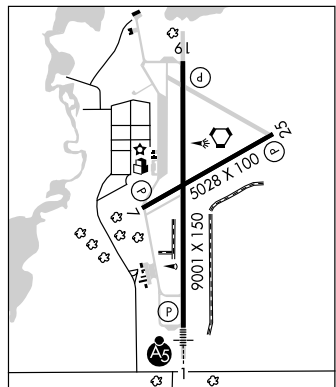
RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

(L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' at fld. 677/7W. HIWAS.

DME portion unusable 260°-280°, byd 30 NM blo 4000'.

FELPS NDB (LOM) 206 AP N44°57.65' W83°33.61' 007° 7 NM to fld.

ILS 109.7 I-APN Rwy 01. Class I E. LOM FELPS NDB. ILS unmonitored when twr closed.



APP CRS	Rwy Idg	4999
095°	TDZE	752
	Apt Elev	754

RNAV (GPS) RWY 9

ALMA/GRATIOT COMMUNITY (AMN)

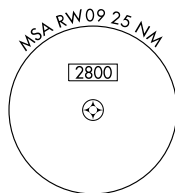
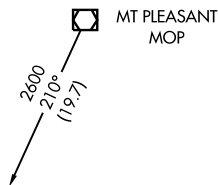
 	GPS or RNP-0.3 required.	MISSED APPROACH: Climb to 2600 direct CEGEE WP and hold.
	DME/DME RNP-0.3 NA.	
	Circling NA at night to Rwys 18 and 36.	

AWOS-3
124.175

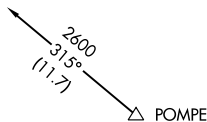
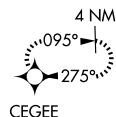
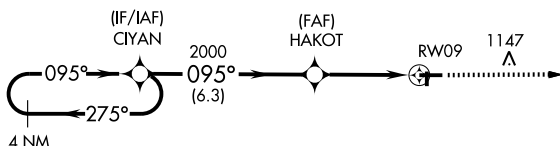
SAGINAW APP CON ★
126.45 235.625

CLNC DEL
119.25

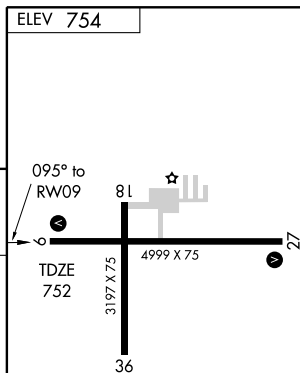
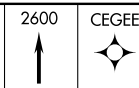
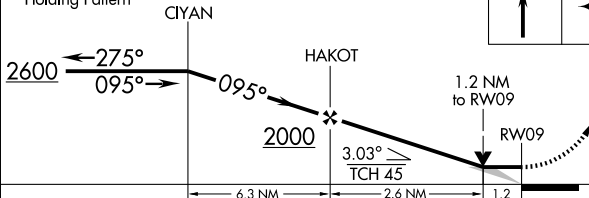
UNICOM
122.8 (CTAF)



1742 Δ



4 NM
Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1160-1	408 (500-1)	1160-1¼	408 (500-1¼)
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1½ 466 (500-1½)	1320-2 566 (600-2)

REIL Rwys 9 and 27
MIRL Rwys 9-27 and 18-36

APP CRS **185°**
 Rwy Idg **3197**
 TDZE **754**
 Apt Elev **754**

RNAV (GPS) RWY 18

ALMA/GRATIOT COMMUNITY (AMN)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
 Straight-in minimums NA at night.
 Circling NA at night to Rwy 18 and 36.

MISSED APPROACH: Climbing right turn to 2800
 direct OREYO WP and hold.

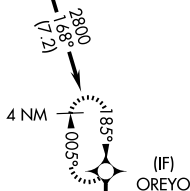
AWOS-3
124.175

SAGINAW APP CON ★
126.45 235.625

CLNC DEL
119.25

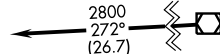
UNICOM
122.8 (CTAF) 0

(IAF) MT PLEASANT MOP
 Procedure NA for arrivals on MOP VOR/DME
 airway radials 106 CW 183.

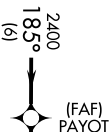


▲ 1742

(IAF) SAGINAW MBS

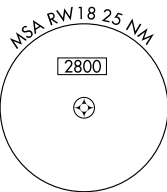


Procedure NA for arrivals on
 MBS VOR/DME airway radials
 212 CW 320.

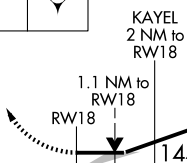
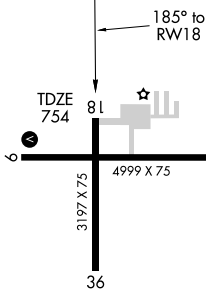


KAYEL
 2 NM to
 RW18

▲ 1147



ELEV 754



PAYOT

OREYO

Procedure
 Turn NA



CATEGORY	A	B	C	D
LNAV MDA	1160-1	406 (500-1)	1160-1¼ 406 (500-1¼)	NA
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1½ 466 (500-1½)	NA

REIL Rwy 9 and 27 0
 MRL Rwy 9-27 and 18-36 0

APP CRS 275°	Rwy Idg TDZE Apt Elev	4999 754 754
------------------------	-----------------------------	---

RNAV (GPS) RWY 27

ALMA/GRATIOT COMMUNITY (AMN)

	GPS or RNP-0.3 required.
 NA	DME/DME RNP-0.3 NA.
	Circling NA at night to Rwy 18 and 36.

MISSED APPROACH: Climbing right turn to 2600 direct CEGEE WP and hold.

AWOS-3
124,175

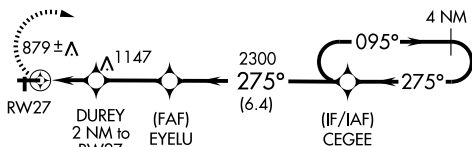
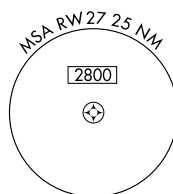
SAGINAW APP CON ★
126.45 235.625

CLNC DEL
119.25

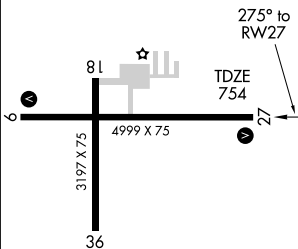
UNICOM
122.8 (CTAF) **L**

Procedure NA for arrivals on MBS VOR/DME
airway radials 212 CW 284.

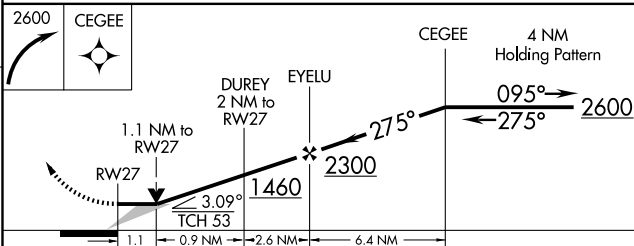
SAGINAW
MBS

 $1850 \pm \Delta$ 

ELEV 754



Procedure NA for arrivals at LUGGS on V45 southbound.



CATEGORY	A	B	C	D
LNAV MDA	1160-1	406 (500-1)	1160-1 $\frac{1}{4}$	406 (500-1 $\frac{1}{4}$)
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1 $\frac{1}{2}$ 466 (500-1 $\frac{1}{2}$)	1320-2 566 (600-2)

REIL Rwy 9 and 27 **L**
MIRL Rwy 9-27 and 18-36 **L**

ALMA, MICHIGAN
Orig 10154

ALMA/GRATIOT COMMUNITY (AMN)
RNAV (GPS) RWY 27

43°19'N - 84°41'W

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME MOP
110.6
Chan **43**

APP CRS
178°

Rwy Idg **3197**
TDZE **754**
Apt Elev **754**

VOR/DME RWY 18

ALMA/GRATIOT COMMUNITY (AMN)

▼
▲ NA


MISSED APPROACH: Climb to 1200, then climbing right turn to 2600 via MOP R-178 to FILKO/7 DME and hold.

AWOS-3
124.175

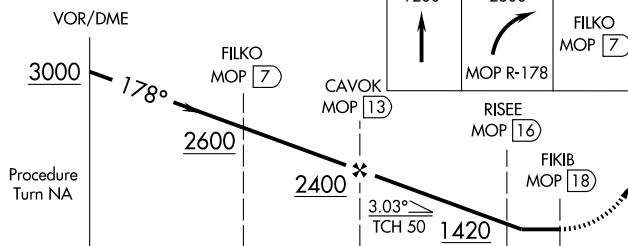
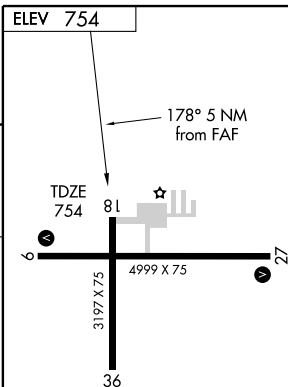
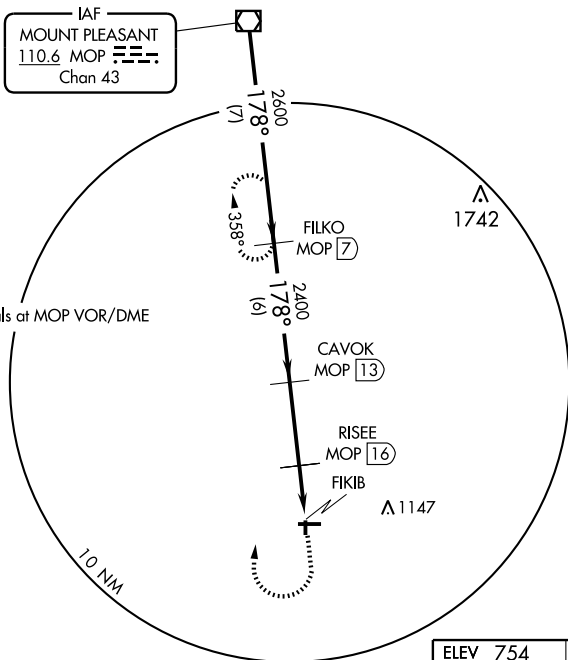
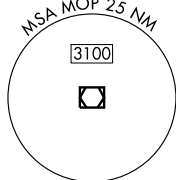
SAGINAW APP CON ★
126.45 235.625

CLNC DEL
119.25

UNICOM
122.8 (CTAF) 0

IAF
MOUNT PLEASANT
110.6 MOP 
Chan 43

Procedure NA for arrivals at MOP VOR/DME via V233 Northbound.



CATEGORY	A	B	C	D
S-18	1140-1	386 (400-1)	1140-1 1/4 386 (400-1 1/4)	NA
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1 1/2 466 (500-1 1/2)	NA

REIL Rwy 9 and 27 0
MIRL Rwy 9-27 and 18-36 0

ALMA

GRATIOT COMMUNITY (AMN) 3 SW UTC-5(-4DT) N43°19.33' W84°41.28'

DETROIT

754 B S4 FUEL 100LL, JET A OX3 NOTAM FILE AMN

L-28J

RWY 09-27: H4999X75 (ASPH) S-40, D-65, 2S-82 MIRL

IAP

RWY 09: REIL. VASI(V2L)—GA 3.0° TCH 45'.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 53'.

RWY 18-36: H3197X75 (ASPH) S-26 MIRL

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2130Z†. Powered parachute activity on and invof arpt. Animals on and invof arpt. ACTIVATE MIRL Rwy 09-27 and 18-36; VASI Rwy 09 and 27; REIL Rwy 09 and 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 124.175 (989) 463-3433

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†) CLNC DEL 119.25

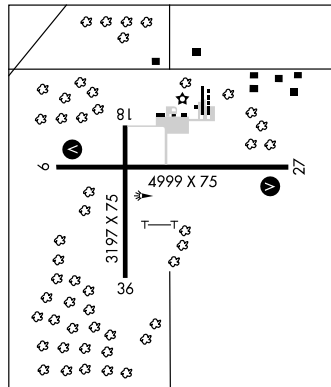
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 248° 29.5 NM to fld. 663/3W. HIWAS.

ALMA NDB (MWH) 329 AMN N43°19.40' W84°47.18' 096° 4.3 NM to fld. NOTAM FILE AMN.



ALMENA (See PAW PAW)

ALPENA

ALPENA CO RGNL (APN) 6 W UTC-5(-4DT) N45°04.69' W83°33.62'

LAKE HURON

690 B S2 FUEL 100LL, JET A LRA Class I, ARFF Index A NOTAM FILE APN

H-11A, L-31C

RWY 01-19: H9001X150 (CONC-GRVD) S-95, D-115, 2S-170, 2T-560, 2D/2D2-468 HIRL

IAP

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Tree.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Tree.

RWY 07-25: H5028X100 (CONC-GRVD) S-93, D-111, 2S-170,

2T-553, 2D/2D2-438 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 07: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

RWY 19: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 25: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

ARRESTING GEAR/SYSTEM

RWY 01 BAK 14 BAK-12A(B) (1500')

BAK 14 BAK-12A(B) (1500') RWY 19

AIRPORT REMARKS: Attended 1200-0000Z†. For svc after hrs call 989-920-7988. Birds and other wildlife on and invof arpt. Twy H, east of Rwy 01-19 clsd to military acft. Twy B not visible from twr. Twy A west of Twy C and Twy B rstd to military only. Be alert for uncontrolled vehicles on the twy. Twy to maintenance hangars unlit. 48 hrs PPR for air carrier ops with more than 30 passenger seats—call arpt manager 989-354-2907. ACTIVATE HIRL Rwy 01-19; MIRL Rwy 07-25; REIL Rwy 19, Rwy 07 and Rwy 25; and MALSR Rwy 01—CTAF. ANG-72 hr PPR; ctc Base OPS DSN 741-3226, C989-354-6226 for PPR number. ANG duty hrs Mon-Fri 1300-2130Z† except holidays.

WEATHER DATA SOURCES: ASOS 120.675 (989) 356-3662.

HIWAS 108.8 APN.

COMMUNICATIONS: CTAF 121.35 UNICOM 122.95

RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.475 (2100-1300Z†)

Ⓡ APP/DEP CON 128.425 (1300-2100Z†).

TOWER 121.35 (Weekdays 1300-2100Z† except holidays.) GND CON 121.9

AIRSPACE: CLASS D svc Weekdays 1300-2100Z† except holidays other times CLASS E.

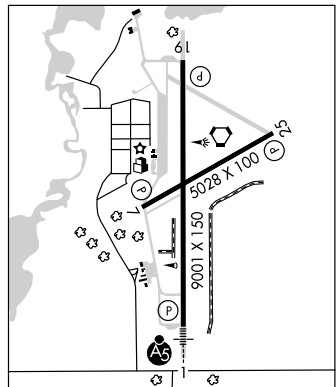
RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

(L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' at fld. 677/7W. HIWAS.

DME portion unusable 260°-280°, byd 30 NM blo 4000'.

FELPS NDB (LOM) 206 AP N44°57.65' W83°33.61' 007° 7 NM to fld.

ILS 109.7 I-APN Rwy 01. Class I E. LOM FELPS NDB. ILS unmonitored when twr closed.

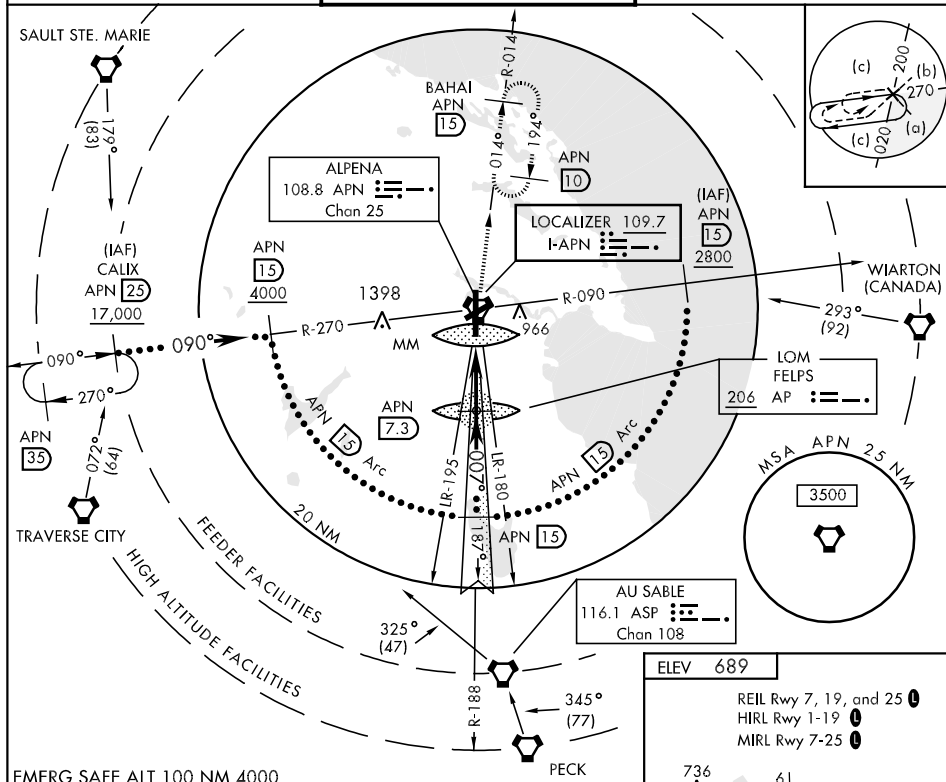


LOC I-APN 109.7	APCH CRS 007°	Rwy ldg TDZE Arpt Elev	9001 685 689
---------------------------	-------------------------	------------------------------	---

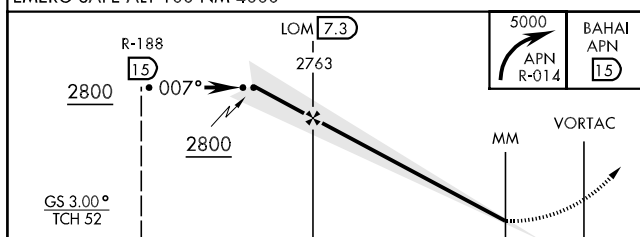
JAL-718 [USAF]

ALPENA COUNTY RGNL (KAPN)

T	MALSR A5	MISSED APPROACH: Climb to 5000 via R-014 to BAHAI 15 DME and hold.
----------	--------------------	--

ALPENA APP CON
128.425 379.3ALPENA TOWER ★
121.35 (CTAF) 0 318.1GND CON
121.9 275.8

EMERG SAFE ALT 100 NM 4000

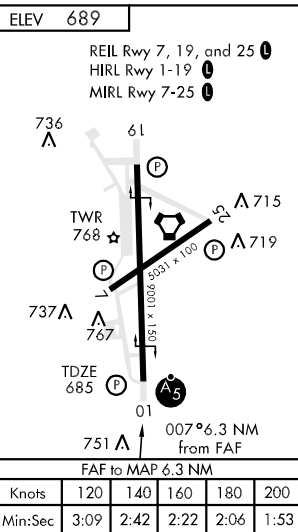


CATEGORY	C	D	E
S-ILS 1	885-1/2	200 (200-1/2)	
S-LOC 1	1140-3/4 455 (500-3/4)	1140-1 455 (500-1)	
CIRCLING	1140-1 1/2 451 (500-1 1/2)	1240-2 551 (600-2)	1280-2 591 (600-2)

ALPENA, MICHIGAN

45°05'N-83°34'W

Amdt 4 09351



ALPENA COUNTY RGNL (KAPN)

HI-ILS/DME RWY 1

HI-TACAN RWY 19

VORTAC APN
108.8
Chan 25

APCH CR
175°

Rwy Idg	9001
TDZE	683
Arpt Elev	689

JAL-718 [USAF]

ALPENA COUNTY RGNL (KAPN)

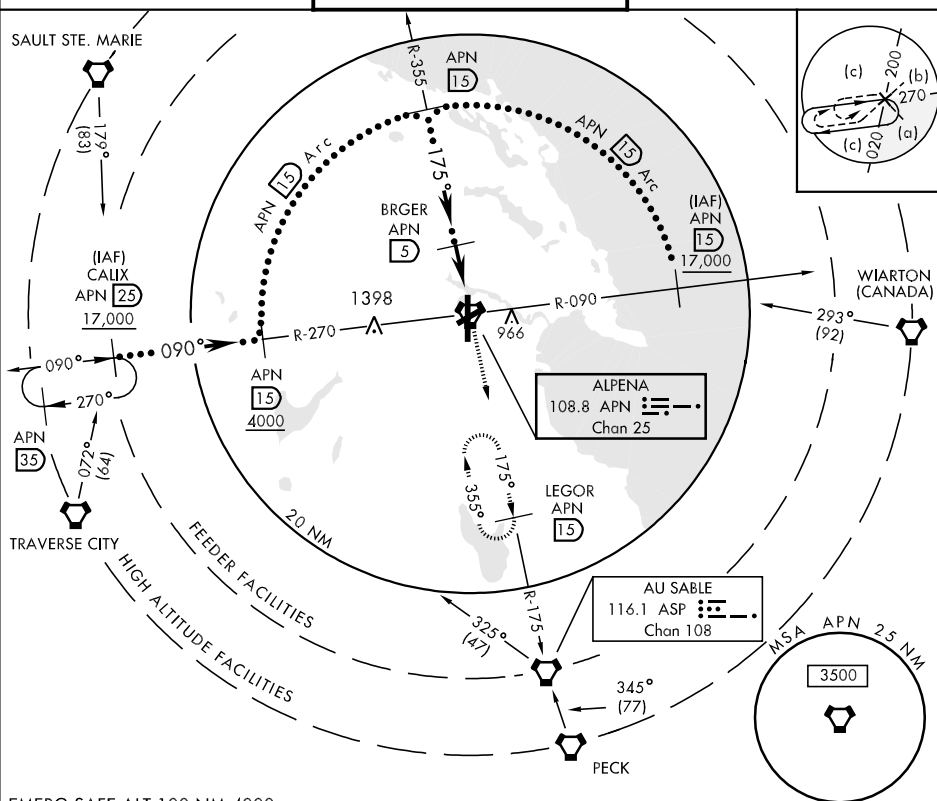


MISSED APPROACH: Climb to 5000 via R-175 to LEGOR 15 DME and hold.

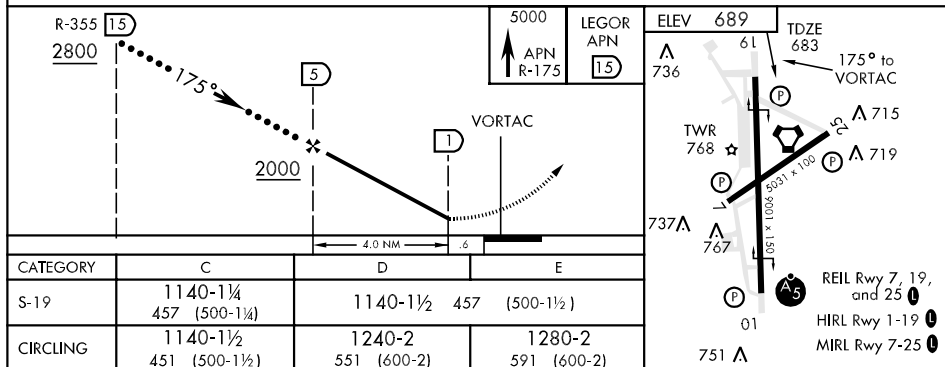
ALPENA APP CON
128.425 379.3

ALPENA TOWER ★
121.35 (CTAF) **L** 318.1

GND CON
121.9 275.8



EMERG SAFE ALT 100 NM 4000

ALPENA, MICHIGAN
09351

45° 05' N-83° 34' W

ALPENA COUNTY RGNL (KAPN)



HI-TACAN RWY 19

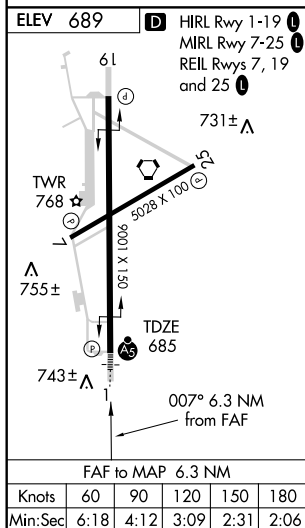
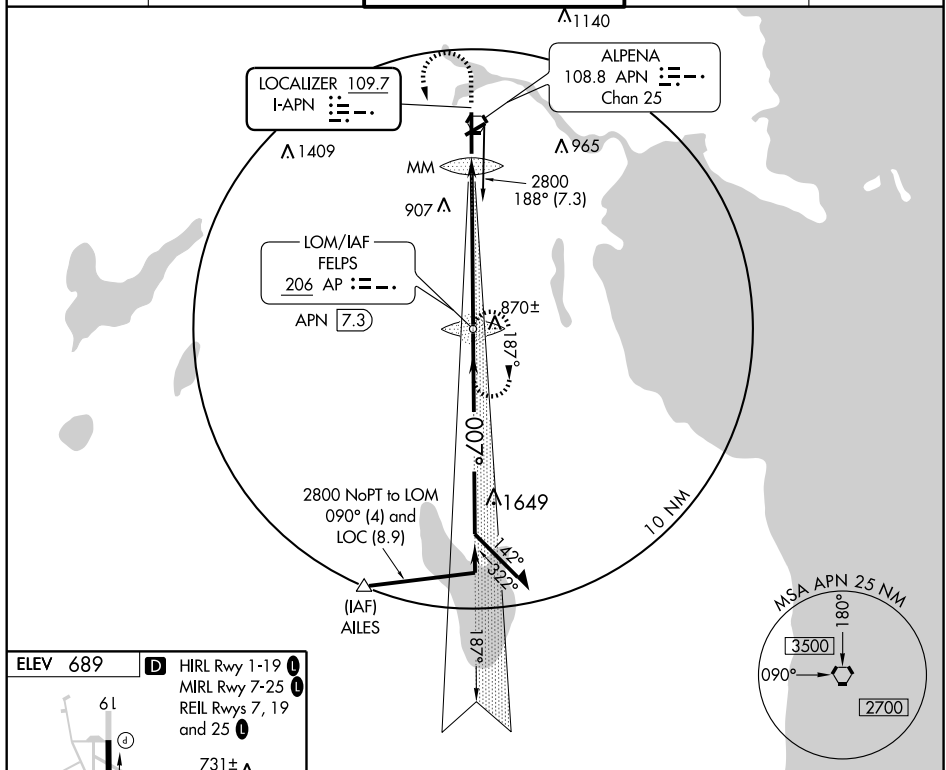
EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

LOC I-APN <u>109.7</u>	APP CRS 007°	Rwy Idg TDZE Apt Elev	9001 685 689
----------------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 1
ALPENA COUNTY RGNL (APN)

 When local altimeter setting not received, use Roger city altimeter setting and increase all DA 55 feet and all MDA 60 feet and increase S-LOC 1 Cats C and D visibility ¼ mile. ADF Required.		 MALSR		MISSED APPROACH: Climb to 1100 then climbing left turn to 2800 direct AP LOM and hold.	
ASOS 120.675	ALPENA APP CON ★ 128.425 379.3	ALPENA TOWER ★ 121.35 (CTAF) 0 318.1		GND CON 121.9 275.8	UNICOM 122.95

[illegible]

LOM AP	APP CRS	Rwy Idg	9001
<u>206</u>	007°	TDZE	685
		Apt Elev	689

NDB RWY 1
ALPENA COUNTY RGNL (APN)

T
A NA

When local altimeter setting not received, use Roger City altimeter setting and increase all MDA 60 feet and Cat C and D visibility $\frac{1}{4}$ mile.

MALS^R

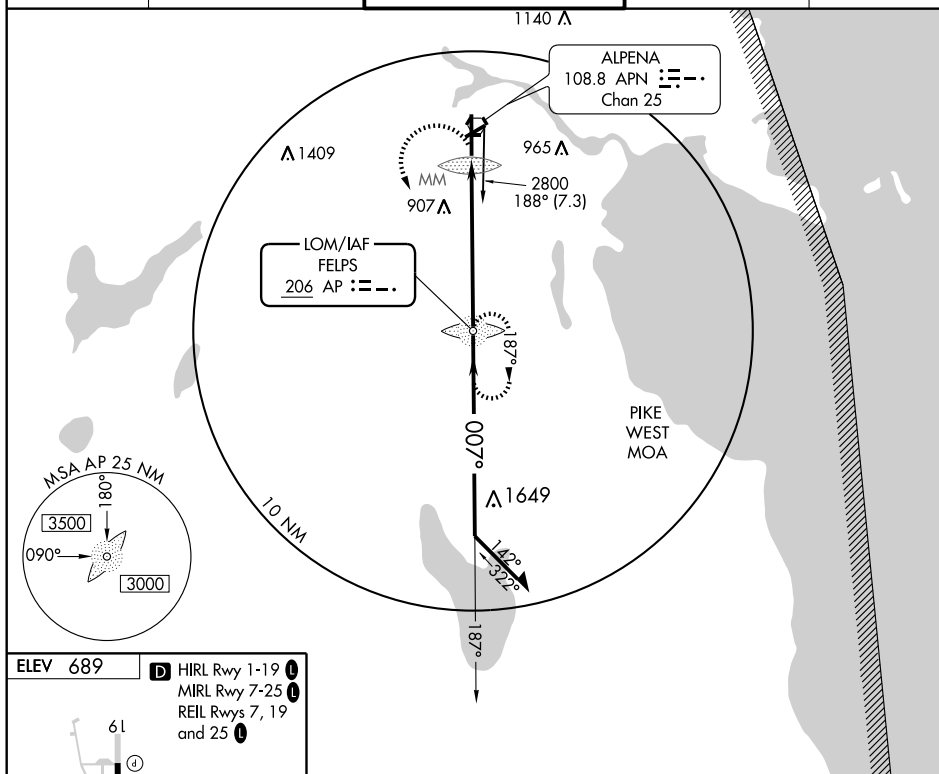
MISSED APPROACH: Climbing left turn to 2800 direct AP LOM and hold.

ASOS
120.675

ALPENA APP CON ★
128.425 379.3

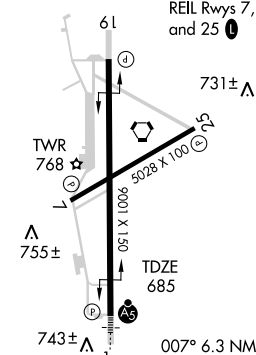
ALPENA TOWER ★
121.35 (CTAF) **L** 318.1

GND CON
121.9 275.8

UNICOM
122.95

ELEV 689

D HIRL Rwy 1-19 **L**
MIRL Rwy 7-25 **L**
REIL Rwys 7, 19
and 25 **L**



FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

2800	AP 206
------	-----------

AP

LOM Remain within 10 NM

Diagram illustrating a star fix. A vertical line is labeled "LOM" at the top. A horizontal line is labeled "2800" below it. A line segment is labeled "18.7°" and "within 10 NM". A line segment is labeled "007°" and "2800". A star symbol is located at the intersection of the vertical and horizontal lines.

CATEGORY	A	B	C	D
S-1	1280-3/4 595 (600-3/4)		1280-1 595 (600-1)	1280-1½ 595 (600-1½)
CIRCLING	1280-1 591 (600-1)		1280-1½ 591 (600-1½)	1280-2 591 (600-2)

ALPENA, MICHIGAN
Amdt 7 09295

45°05'N - 83°34'W

ALPENA COUNTY RGNL (APN)
NDB RWY 1

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

WAAS CH 50310 W01A	APP CRS 007°	Rwy Idg TDZE Apt Elev	9001 685 689
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 1

ALPENA COUNTY RGNL (APN)

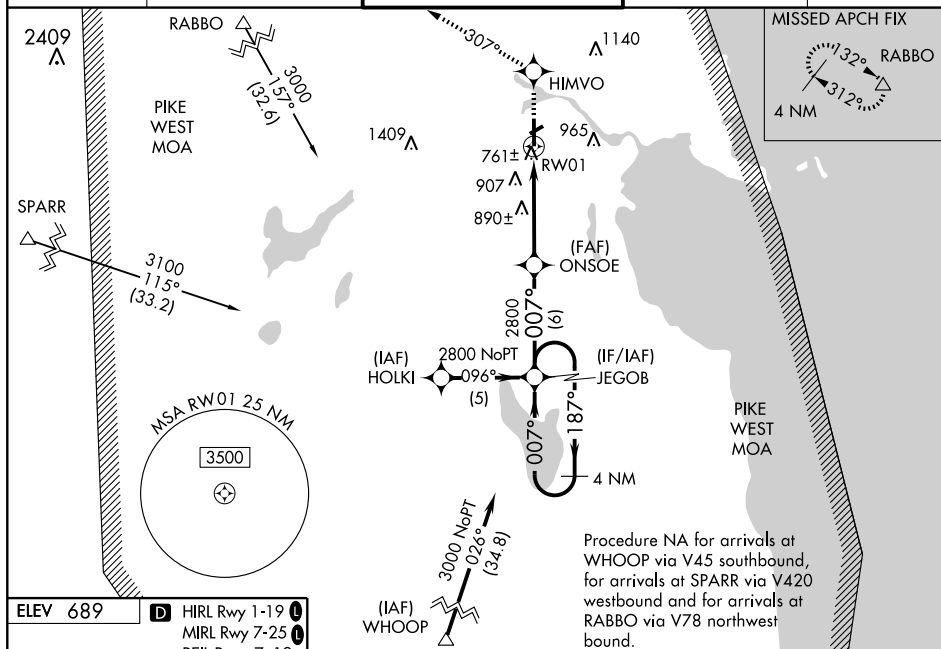
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Rogers City altimeter setting and increase all DA 55 feet and all MDA 60 feet and increase LPV all Cats, LNAV/VNAV all Cats and LNAV Cats C and D visibilities ¼ mile. Baro-VNAV and VDP NA when using Roger City altimeter setting. For inoperative MALSR, increase LPV all Cats visibility to 1.

MALSR

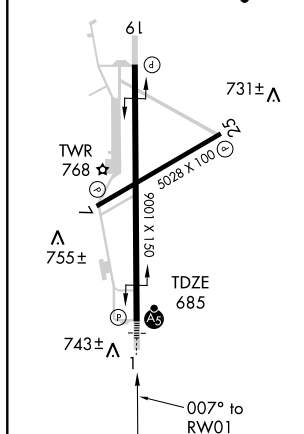


MISSED APPROACH: Climb to 3500 direct HIMVO and via 307° track to RABBO and hold.

ASOS 120.675	ALPENA APP CON ★ 128.425 379.3	ALPENA TOWER ★ 121.35 (CTAF) 318.1	GND CON 121.9 275.8	UNICOM 122.95
------------------------	--	--	-------------------------------	-------------------------



ELEV 689	D HIRL Rwy 1-19 MIRL Rwy 7-25 REIL Rwy 7, 19 and 25
----------	---



4 NM Holding Pattern	JEGOB	ONSOE	3500	HIMVO	307° tr	RABBO
2800	187°	007°	2800	*1.3 NM to RW01		
GS 3.00°	TCH 52	VGSI and RNAV glidepath not coincident.				
CATEGORY	A	B	C	D		
LPV DA		974-½	289 (300-½)			
LNAV/VNAV DA		1029-¾	344 (400-¾)			
LNAV MDA	1160-½	475 (500-½)	1160-¾ 475 (500-¾)	1160-1 475 (500-1)		
CIRCLING	1160-1	471 (500-1)	1160-1 ½ 471 (500-1½)	1260-2 571 (600-2)		

WAAS CH 53717 W19A	APP CRS 187°	Rwy Idg TDZE Apt Elev	9001 683 690
--	------------------------	-----------------------------	---

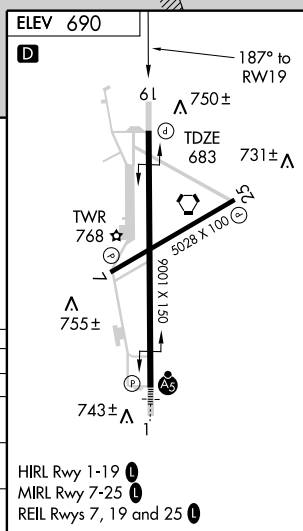
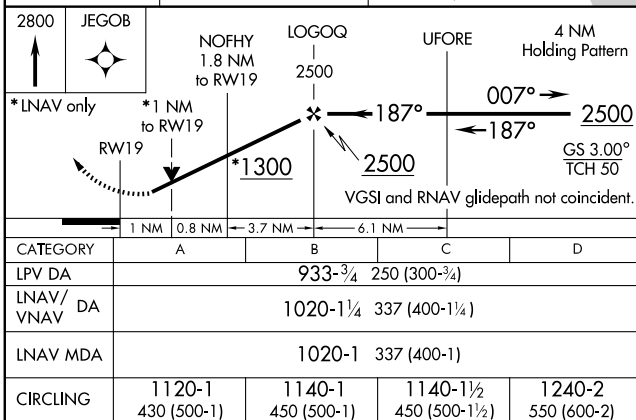
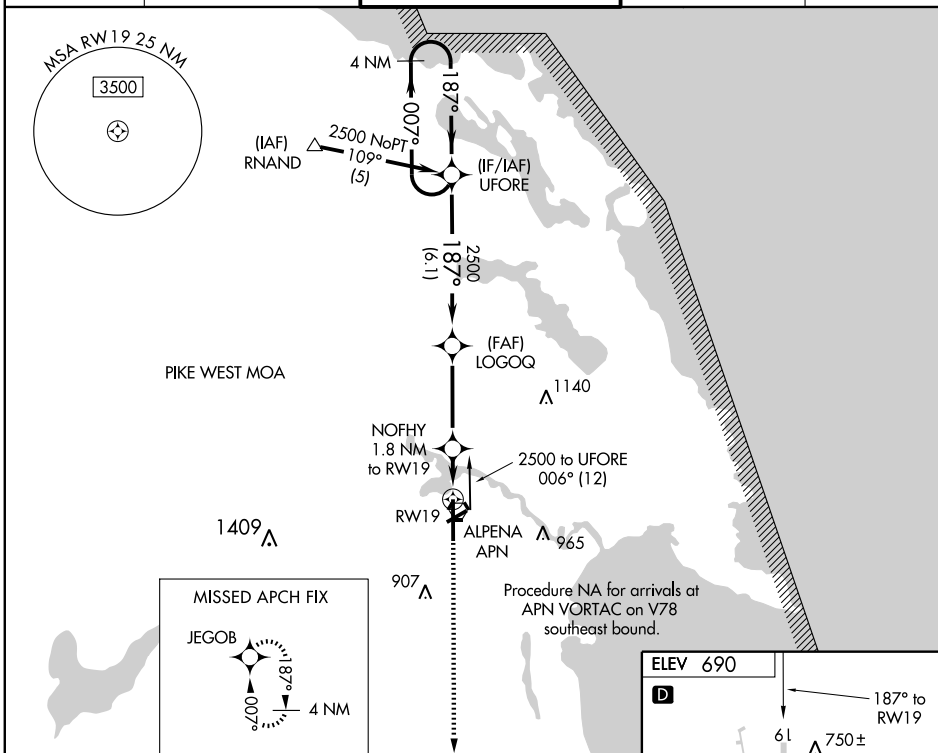
RNAV (GPS) RWY 19

ALPENA COUNTY RGNL (APN)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2800 direct JEGOB and hold.

ASOS 120.675	ALPENA APP CON ★ 128.425 379.3	ALPENA TOWER ★ 121.35 (CTAF) 318.1	GND CON 121.9 275.8	UNICOM 122.95
------------------------	--	--	-------------------------------	-------------------------



VORTAC APN	APP CRS	Rwy Idg	9001
108.8	014°	TDZE	685
Chan 25		Apt Elev	689

VOR RWY 1
ALPENA COUNTY RGNL (APN)



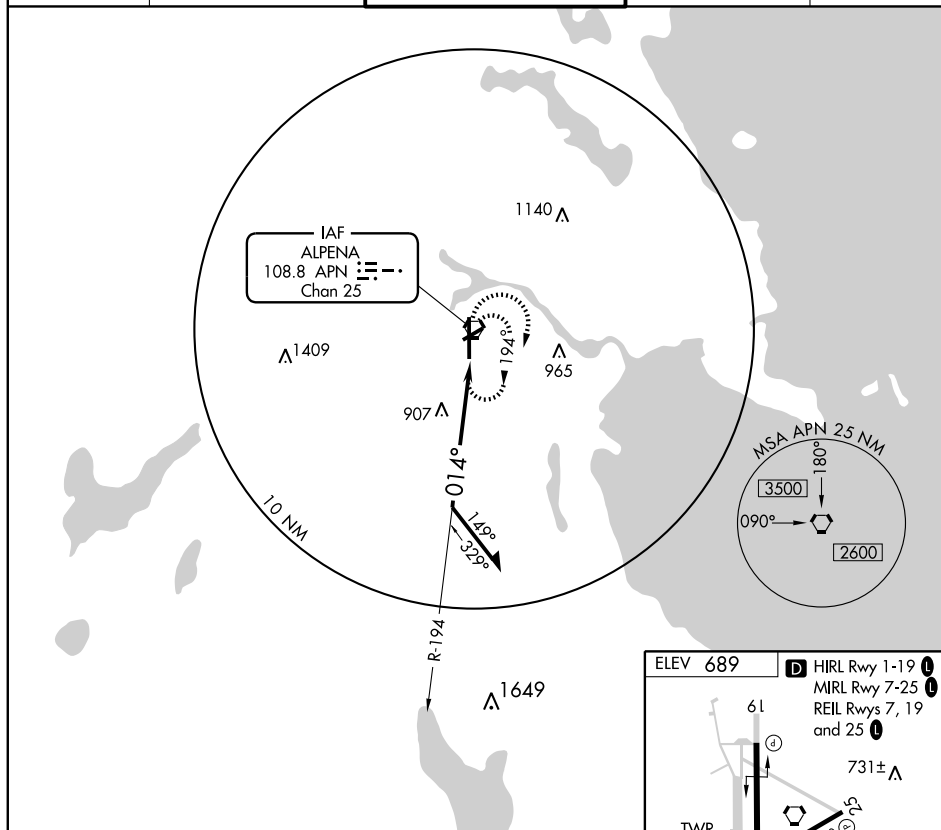
MISSED APPROACH: Climbing right turn to 2800 in APN VORTAC holding pattern.

ASOS
120,675

ALPENA APP CON ★
128.425 379.3

ALPENA TOWER ★
121.35 (CTAF) **L** 318.1

GND CON
121.9 275.8

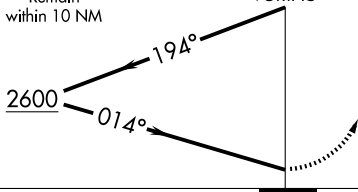
UNICOM
122.95

Remain
within 10 NM

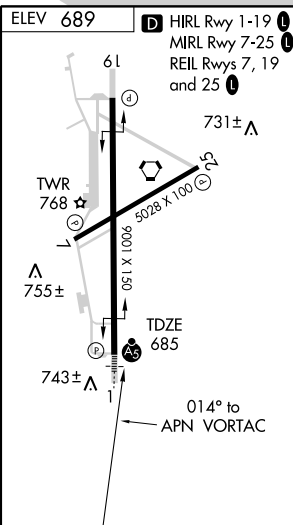
VORTAC

2800

APN



CATEGORY	A	B	C	D
S-1	1280-3/4	595 (600-3/4)	1280-1 595 (600-1)	1280-1 1/4 595 (600-1 1/4)
CIRCLING	1280-1	591 (600-1)	1280-1 1/2 591 (600-1 1/2)	1280-2 591 (600-2)

ALPENA, MICHIGAN
Amdt 14C 06MAY10

45°05'N - 83°34'W

ALPENA COUNTY RGNL (APN)
VOR RWY 1

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

AL-5506 (FAA)

ANN ARBOR MUNI (ARB)
ANN ARBOR, MICHIGAN

ATIS
134.55
ANN ARBOR TOWER ★
120.3
GND CON
121.6
CLNC DEL
121.6

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W

900 A FIRE
STATION

ADMINISTRATION
AND
TERMINAL

TWR

TOWER
BASE BLDG

BIJAN
AIR

FIELD
ELEV
839

ELEV
831

ELEV
826

ELEV
822

RWY 06-24
S-45, D-70

CAUTION: BE ALERT TO RUNWAY CROSSING INSTRUCTIONS.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

83°45.0' W

83°44.5' W

AIRPORT DIAGRAM

ANN ARBOR, MICHIGAN
ANN ARBOR MUNI (ARB)

SILVER CITY AIRPARK (53M) 4 N UTC-5(-4DT) N45°07.94' W83°26.88'

LAKE HURON

680 TPA-1480 (800) NOTAM FILE LAN

RWY 08-26: 2400X100 (TURF)

RWY 08: Thld dsplcd 600'. Trees.

RWY 26: Thld dsplcd 400'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Mar and when snow covered except for ski equipped acft. No snow removal. 300' antenna 1/5 mile N of arpt. 30' p-lines in Rwy 08 apch not marked. 35' p-line in Rwy 26 apch marked with orange balls. Rwy 08-26 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

ANDREWS UNIVERSITY AIRPARK (See BERRIEN SPRINGS)

ANN ARBOR MUNI (ARB) 3 S UTC-5(-4DT) N42°13.38' W83°44.74'

DETROIT

839 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 NOTAM FILE ARB

COPTER

RWY 06-24: H3505X75 (CONC-GRVD) S-45, D-70 MIRL

L-28J, A

RWY 06: REIL. PAPI(P4L). Trees.

IAP, AD

RWY 24: ODALS. VASI(V2L)-GA 3.0° TCH 20'. Trees.

RWY 12-30: 2750X110 (TURF) 0.6% up NW

RWY 12: Trees.

RWY 30: Trees.

AIRPORT REMARKS: Attended Nov-Mar 1300-0100Z, Apr-Oct 1300-2300Z. Terminal open 1200Z-dusk. Birds on and invof arpt. Runup area to Rwy 24 and first 200' of parallel twy from the runup area of Rwy 24' not visible and uncontrolled by twr. When twr clsd, confirm snow removal ops and winter conditions-CTAF. No snow removal for Rwy 12-30. Rwy 12-30 marked with yellow cones. When twr clsd ACTIVATE ODALS Rwy 24-CTAF.

WEATHER DATA SOURCES: ASOS 134.55 (734) 668-7173.

LAWRS.

COMMUNICATIONS: CTAF 120.3 ATIS 134.55 UNICOM 123.0

Ⓡ DETROIT APP/DEP CON 118.95

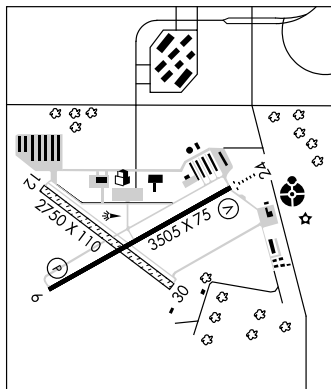
TOWER 120.3 (1300-0100Z) GND CON 121.6 CLNC DEL 121.6

AIRSPACE: CLASS D svc 1300-0100Z other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 214° 13 NM to fld. 950/3W.



ANTRIM CO (See BELLAIRE)

ARCHER MEML FLD (See ST JOHNS)

ARNOLD FLD (See CROSWELL)

ATHELONE WILLIAMS MEML (See DAVISON)

ATLANTA MUNI (Y93) 1 SE UTC-5(-4DT) N45°00.00' W84°08.00'

LAKE HURON

875 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 13-31: 3223X100 (TURF) LIRL

RWY 13: Thld dsplcd 758'. Trees.

RWY 31: Thld dsplcd 569'. Trees.

RWY 05-23: H3000X60 (ASPH) LIRL

RWY 05: Thld dsplcd 1230'. Trees.

RWY 23: PAPI(P2L)-GA 4.0° TCH 22'. Thld dsplcd 370'. Trees.

AIRPORT REMARKS: Attended on req. For winter condition/snow removal Rwy 05-23 confirm prior to use; call 989-785-4724; no snow removal Rwy 13-31. Rwy 13-31 CLOSED Nov-Apr and when snow covered. Birds and deer on and invof the arpt. ACTIVATE LIRL Rwy 13-31 and Rwy 05-23 and PAPI Rwy 23-CTAF. Rwy 13-31 marked with 3' yellow cones. Rwy 13-31 LIRL ops Jun through Sep. OTS indefinitely.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' 266° 25 NM to fld. 677/7W. HIWAS

AU SABLE N44°26.95' W83°23.66'. NOTAM FILE OSC.

LAKE HURON

(H) VOR/DME 116.1 ASP Chan 108 at Oscoda-Wurtsmith. 625/7W. AWOS-3.

H-11A, L-31C

VOR portion unusable 300°-360° byd 35 NM blo 2800'. DME unusable 300°-020° byd 35 NM blo 3000'.

AUSTN N42°07.86' W85°31.79'. NOTAM FILE AZO.

CHICAGO

NDB (LOM) 371 AZ 354° 6.3 NM to Kalamazoo Co. Unmonitored.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 6: Multiple Trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL.

Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL.

Multiple Trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL.

Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.

Rwy 24: Multiple Trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL.

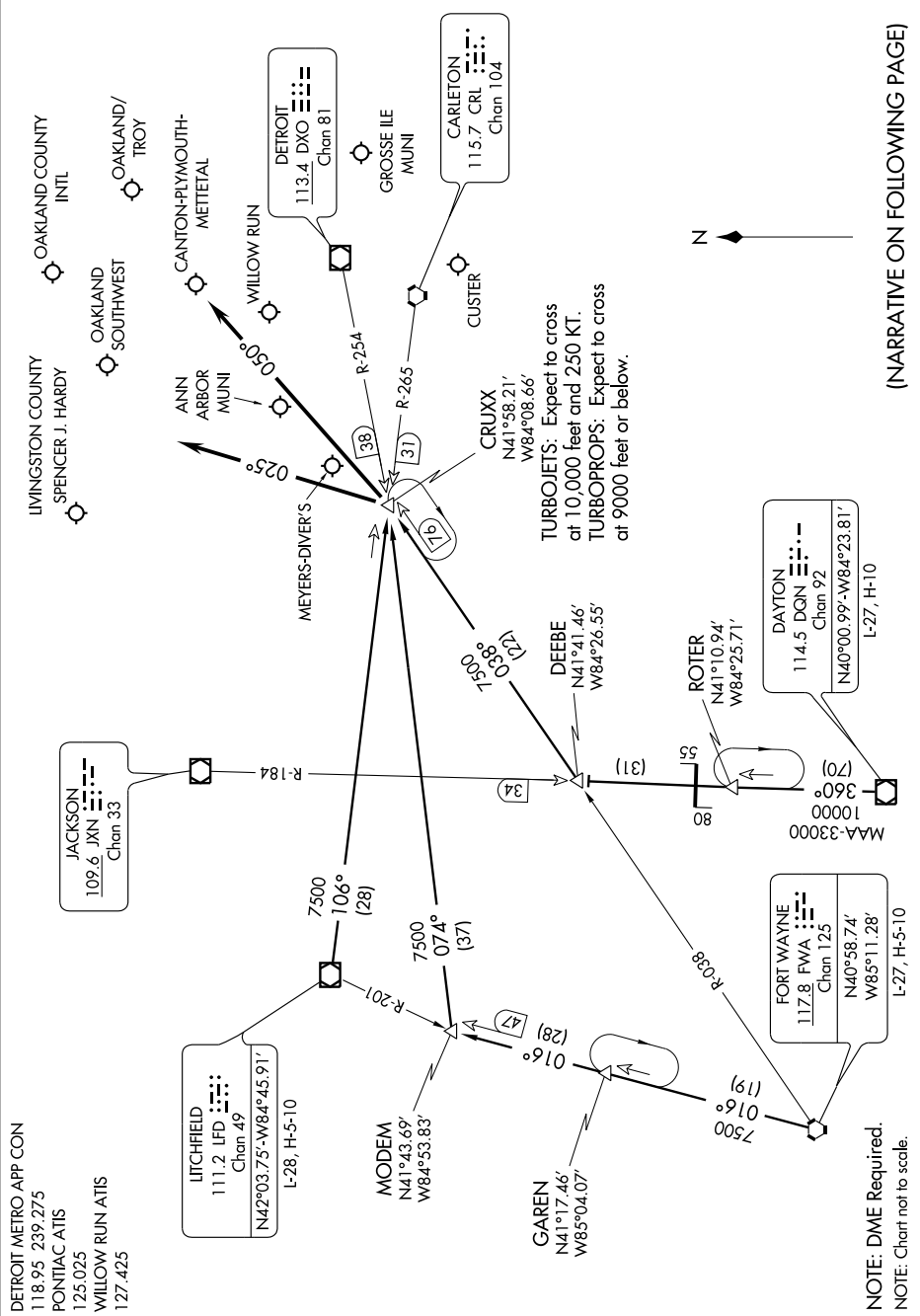
Multiple Trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL.

Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, OMI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

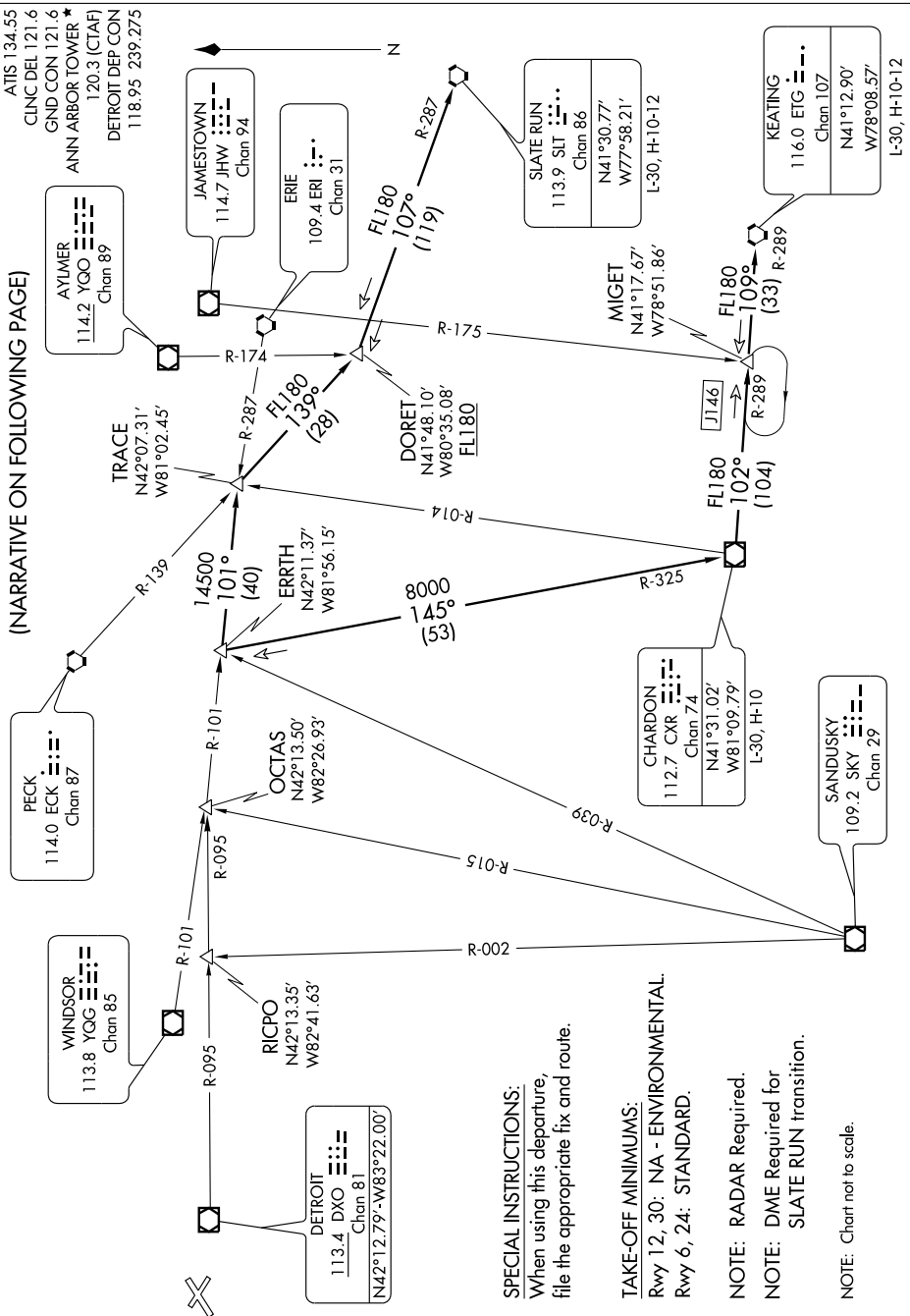
SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

(NARRATIVE ON FOLLOWING PAGE)



EC-1. 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

(ERRTH2.ERRTH) 07354

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6 and 24: Climb via assigned heading for vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 MIGET INT to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

FORT WAYNE THREE DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)
ANN ARBOR, MICHIGAN

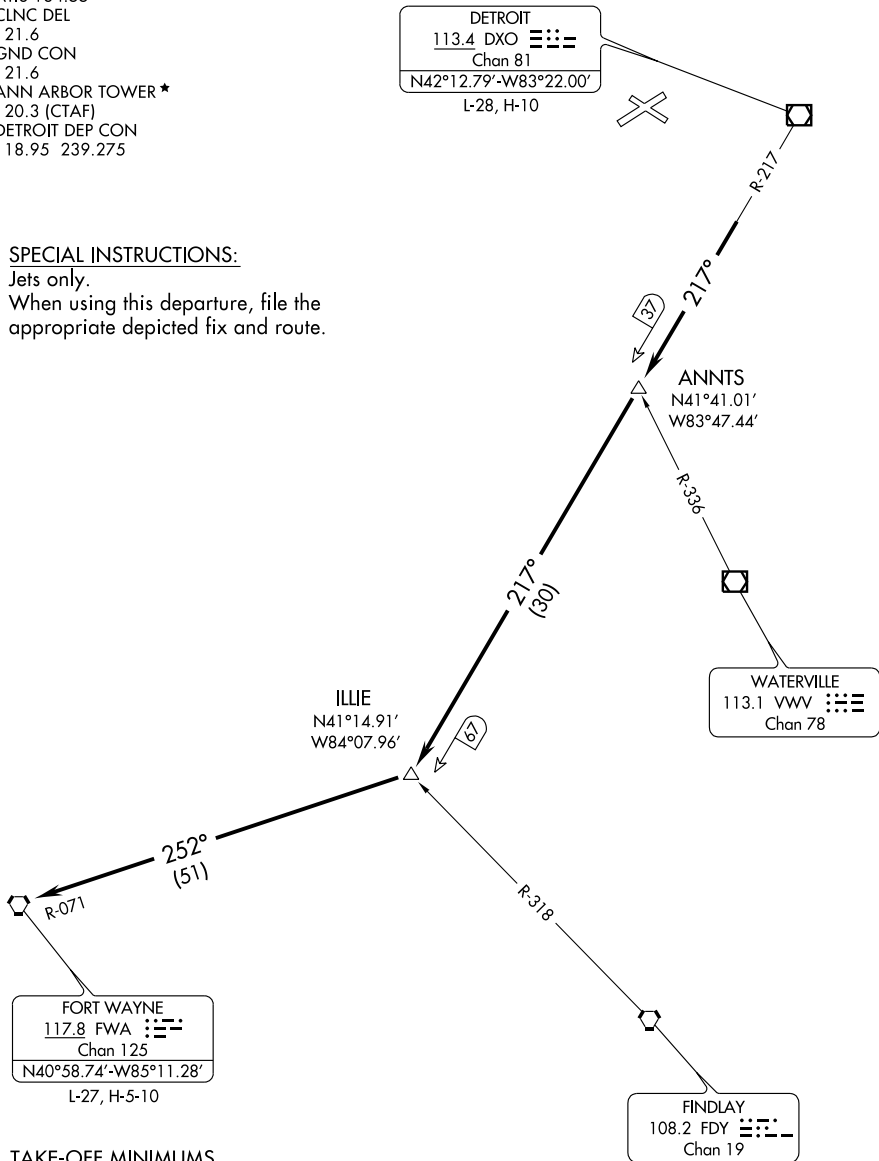
ATIS 134.55
CLNC DEL
121.6
GND CON
121.6
ANN ARBOR TOWER ★
120.3 (CTAF)
DETROIT DEP CON
118.95 239.275

DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.



TAKE-OFF MINIMUMS

Rwys 6, 24: STANDARD.

Rwys 12, 30: NA - Environmental.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL.
Building 312' from DER, 479' right of centerline, 15' AGL/838 MSL.
Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL.
Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL.
Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL.
Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

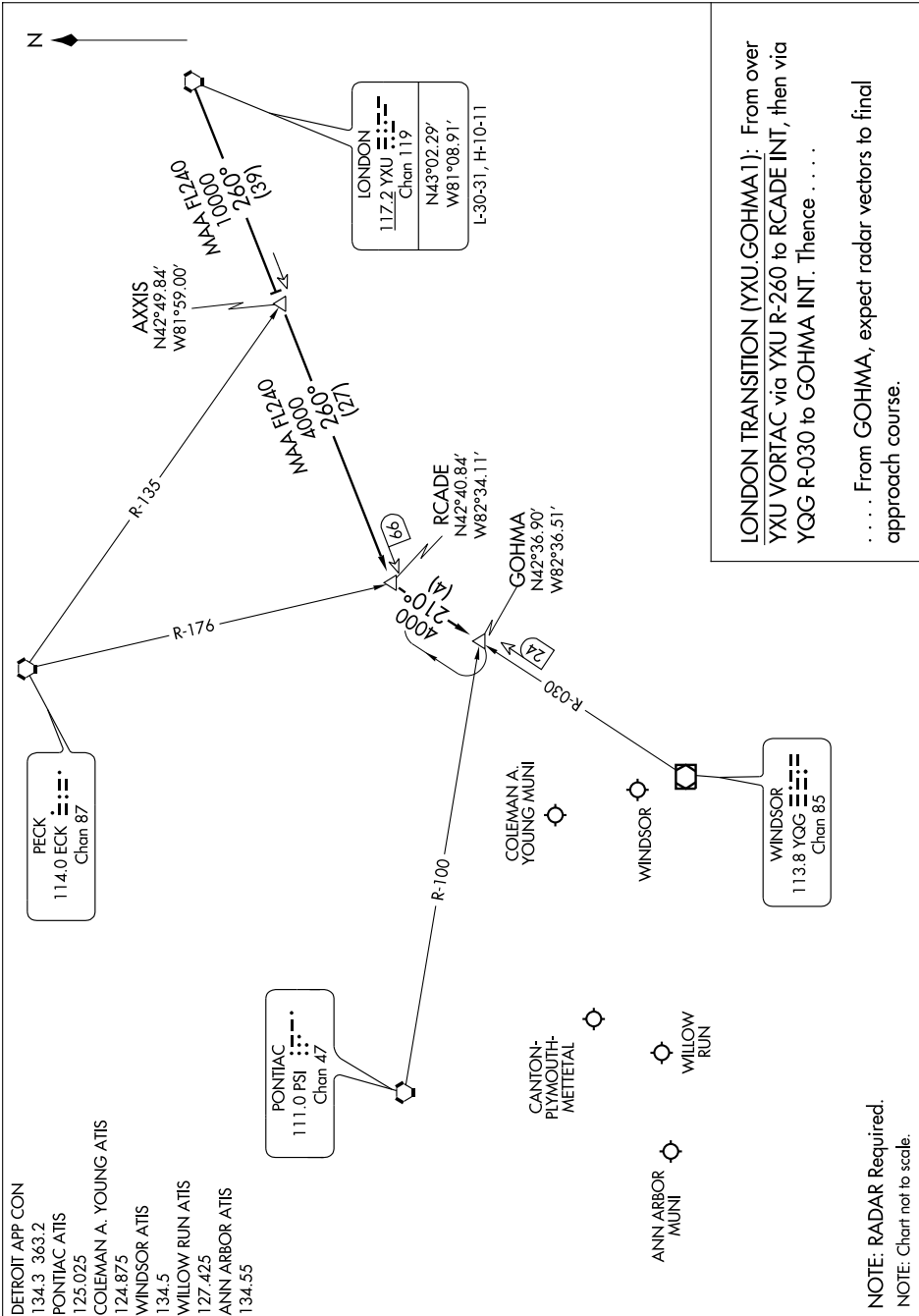
GOHMA ONE ARRIVAL

DETROIT APP CON
134.3 363.2
PONTIAC ATIS
125.025
COLEMAN A. YOUNG ATIS
124.875
WINDSOR ATIS
134.5
WILLOW RUN ATIS
127.425
ANN ARBOR ATIS
134.55

GOHMA ONE ARRIVAL
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN



DETROIT, MICHIGAN



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

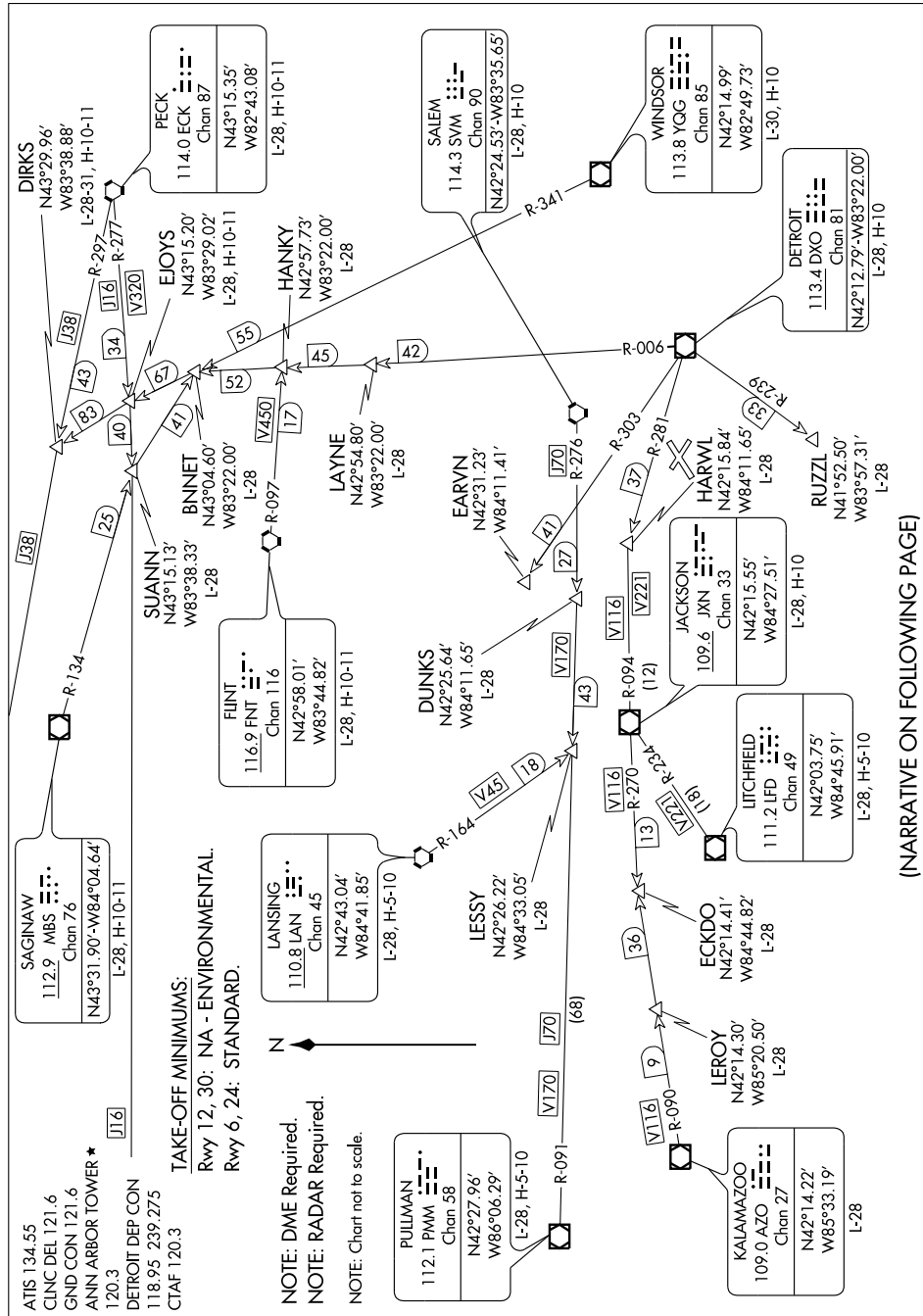
PALACE THREE DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010

PALACE THREE DEPARTURE

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6 AND 24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARNV. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 475' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

(RID4.RID) 09015

RICHMOND FOUR DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

ATIS 134.55
CLNC DEL
121.6
GND CON
121.6
ANN ARBOR TOWER ★
120.3 (CTAF)
DETROIT DEP CON
118.95 239.275



DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

CAVVS
N41°41.04'
W83°34.14'
L-28

SANDUSKY
109.2 SKY
Chan 29

WATERVILLE
113.1 VWV
Chan 78
N41°27.09'
W83°38.32'
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwy 12, 30: NA - Environmental.

Rwy 6, 24: STANDARD.

NOTE: RADAR Required.

NOTE: Chart not to scale.

RICHMOND
110.6 RID
Chan 43
N39°45.30' - W84°50.33'
L-27, H-10

(NARRATIVE ON FOLLOWING PAGE)

RICHMOND FOUR DEPARTURE

(RID4.RID) 09015

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442’ from DER, 47’ right of centerline, up to 79’ AGL/899’ MSL.
Building 312’ from DER, 479’ right of centerline, 15’ AGL/838’ MSL.
Multiple trees beginning 635’ from DER, 182’ left of centerline, up to 59’ AGL/887’ MSL.
Building 99’ from DER, 351’ left of centerline, 22’ AGL/849’ MSL.
- Rwy 24: Multiple trees beginning 479’ from DER, 473’ left of centerline, up to 100’ AGL/929’ MSL.
Multiple trees beginning 462’ from DER, 486’ right of centerline, up to 50’ AGL/885’ MSL.
Terrain 138’ from DER, 475’ right of centerline, 0’ AGL/837’ MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

WAAS CH 77601 W06A	APP CRS 059°	Rwy Idg TDZE Apt Elev	3505 831 839
--	------------------------	-----------------------------	---

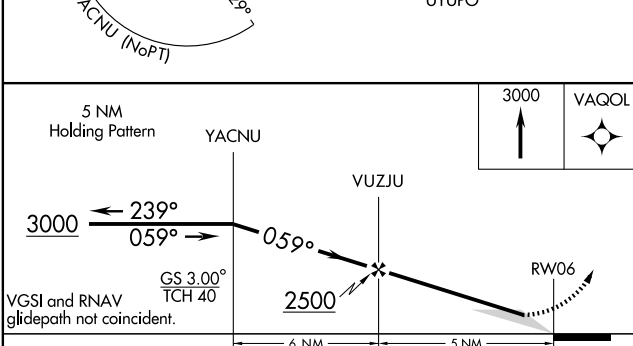
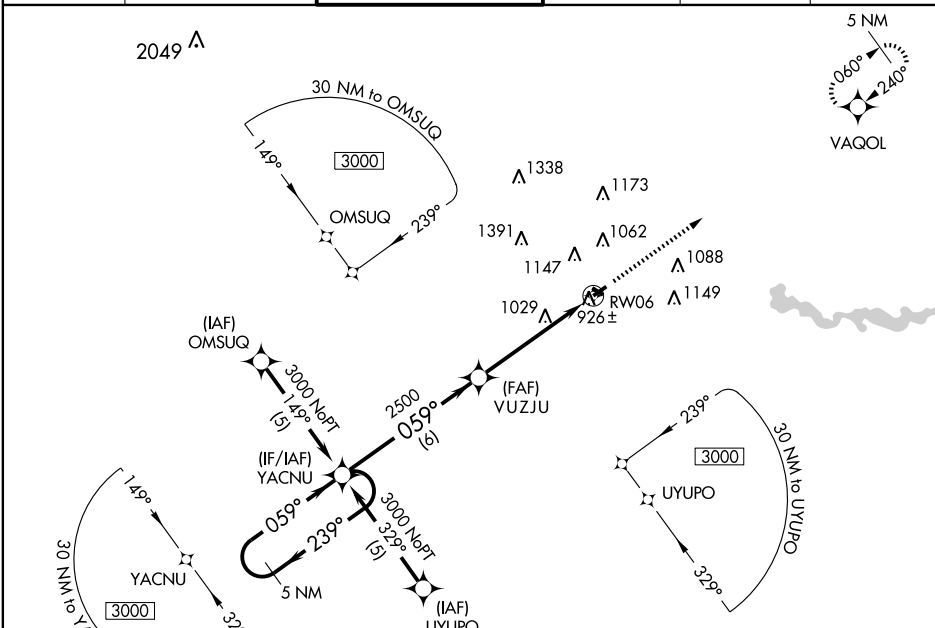
RNAV (GPS) RWY 6

ANN ARBOR MUNI (ARB)

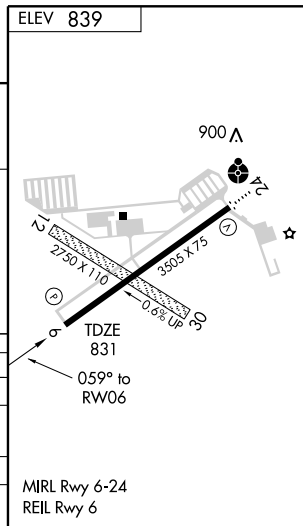
- ▼ DME/DME RNP-0.3 NA. If local altimeter setting not received, use Willow Run altimeter setting and increase all DAs/MDAs 40 feet. Baro-VNAV NA when using Willow Run altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F).

MISSED APPROACH: Climb to 3000 direct VAQOL and hold.

ATIS 134.55	DETROIT APP CON 118.95 363.2	ANN ARBOR TOWER ★ 120.3 (CTAF) 0	GND CON 121.6	CLNC DEL 121.6	UNICOM 123.0
-----------------------	--	---	-------------------------	--------------------------	------------------------



CATEGORY	A	B	C	D
LPV DA	1109-1	278 (300-1)		
LNAV/ DA VNAV	1322-1 $\frac{3}{4}$	491 (500-1 $\frac{3}{4}$)		
LNAV MDA	1340-1	509 (600-1)	1340-1 $\frac{1}{2}$	509 (600-1 $\frac{1}{2}$)
CIRCLING	1500-1 $\frac{3}{4}$	661 (700-1 $\frac{3}{4}$)	1500-2	661 (700-2)



WAAS CH 81901 W24A	APP CRS 240°	Rwy Idg 3505 TDZE 831 Apt Elev 839
--	------------------------	---

RNAV (GPS) RWY 24

ANN ARBOR MUNI (ARB)

▼ **▲** DME/DME RNP-0.3 NA. If local altimeter setting not received, use Willow Run altimeter setting and increase all DAS/MDAs 40 feet. Baro-VNAV NA when using Willow Run altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). Inoperative table does not apply. Visibility reduction by helicopters NA.

ODALS



MISSED APPROACH: Climb to 2000 ft. → VMC → hold

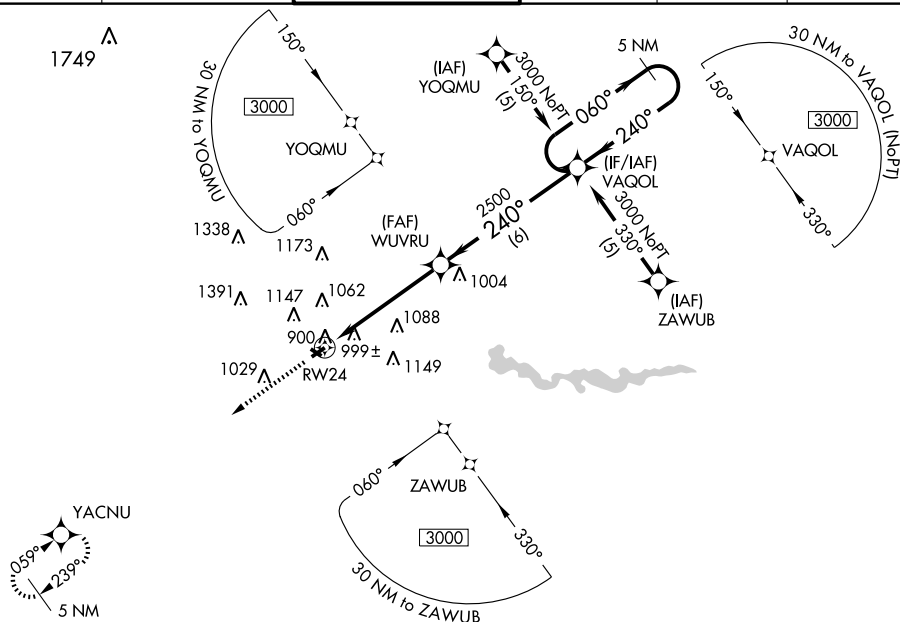
ATIS
134.55

DETROIT APP CON
118.95 363.2

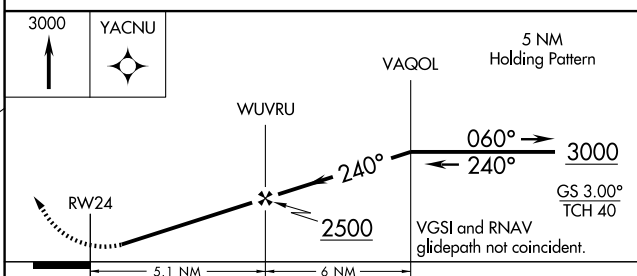
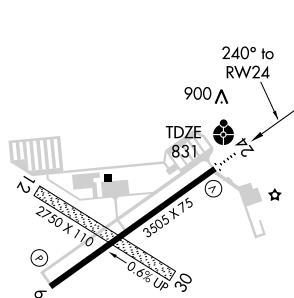
ANN ARBOR TOWER ★
120.3 (CTAF) L

GND CON
121.6

CLNC DEL
121.6

UNICOM
123.0

ELEV 839



CATEGORY	A	B	C	D
LPV DA	1129-1 298 (300-1)			
LNAV/ DA VNAV	1340-1 ³ / ₄ 509 (600-1 ³ / ₄)			
LNAV MDA	1300-1 469 (500-1)		1300-1 ¹ / ₄ 469 (500-1 ¹ / ₄)	1300-1 ¹ / ₂ 469 (500-1 ¹ / ₂)
CIRCLING	1500-1 ³ / ₄ 661 (700-1 ³ / ₄)			1500-2 661 (700-2)

ANN ARBOR, MICHIGAN

Amdt 1 07354

ANN ARBOR MUNI (ARB)

RNAV (GPS) RWY 24

42°13'N - 83°45'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

ROSEWOOD TWO DEPARTURE

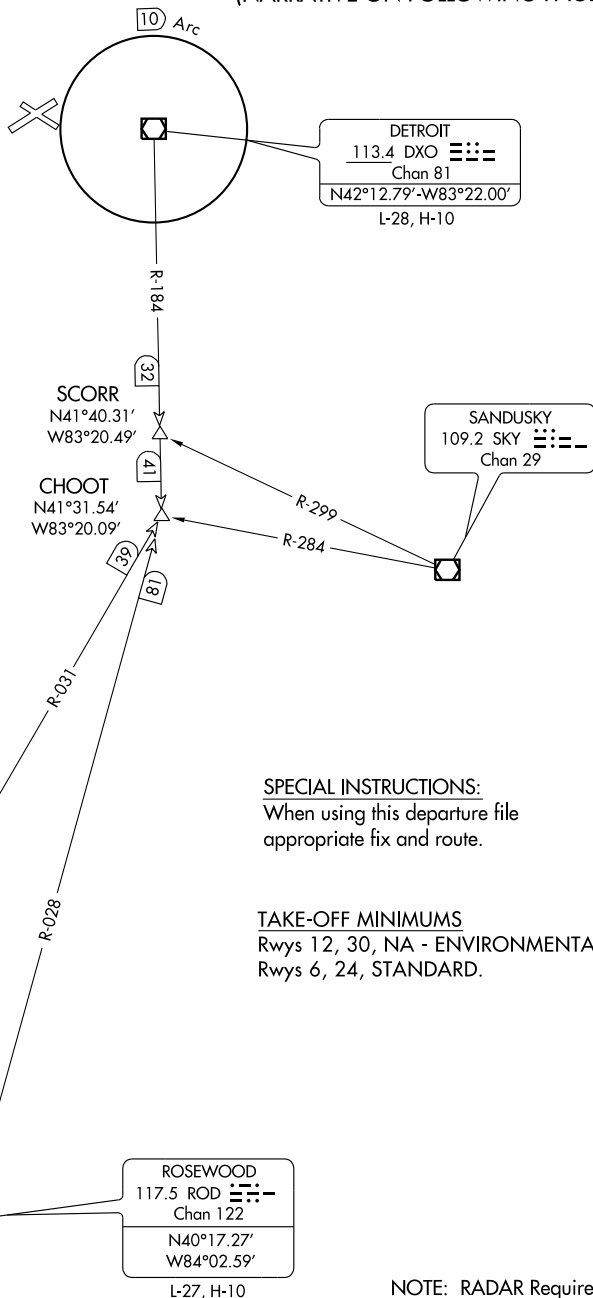
SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

ATIS 134.55
CLNC DEL
121.6
GND CON
121.6
ANN ARBOR TOWER ★
120.3 (CTAF)
DETROIT DEP CON
118.95 239.275

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

SPECIAL INSTRUCTIONS:
When using this departure file
appropriate fix and route.

TAKE-OFF MINIMUMS
Rwys 12, 30, NA - ENVIRONMENTAL.
Rwys 6, 24, STANDARD.

NOTE: RADAR Required.

ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 07354

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

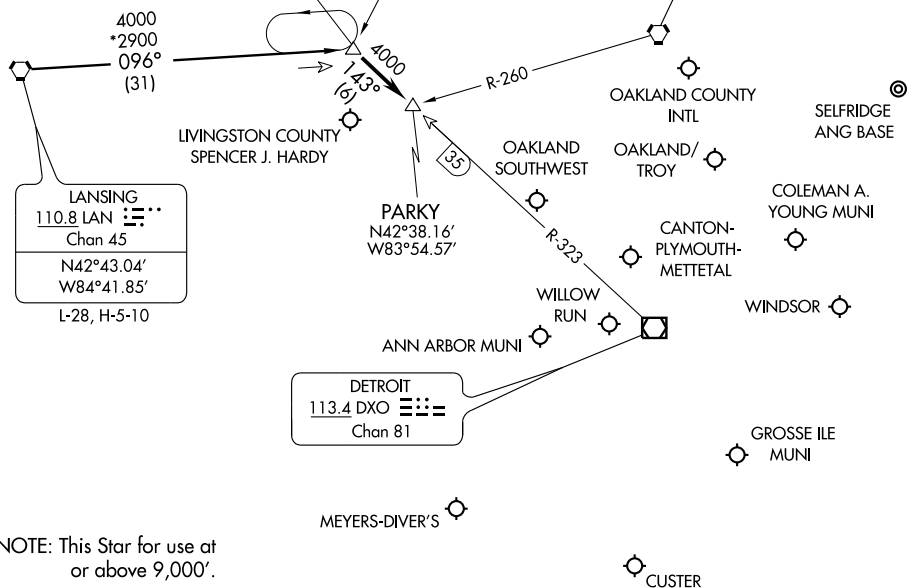
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

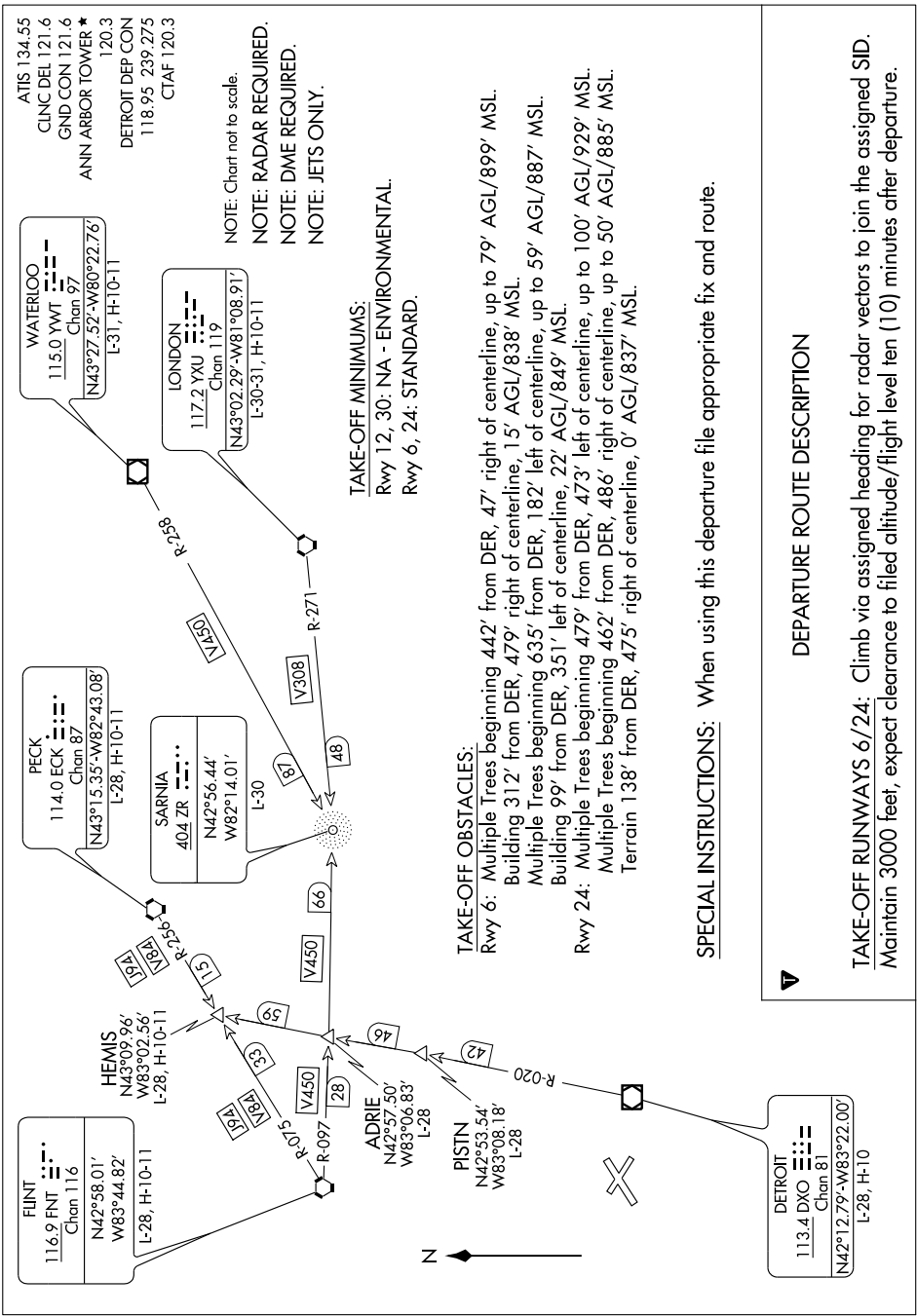
(SPRTN.SPRTN3) 10210

(STCLR3.DXO) 08213
ST. CLAIR THREE DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)
ANN ARBOR, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



ST. CLAIR THREE DEPARTURE
(STCLR3.DXO) 08213

ANN ARBOR, MICHIGAN
ANN ARBOR MUNI (ARB)

EC-1, 26 AUG 2010 to 23 SEP 2010

VORTAC SVM
114.3
Chan **90**

APP CRS
035°

Rwy Idg	
TDZE	
Apt Elev	

3505
830
839

VOR RWY 6
ANN ARBOR MUNI (ARB)



When control tower closed, use Detroit Willow Run altimeter setting.

MISSED APPROACH: Climb to 3000
direct SVM VORTAC and hold.

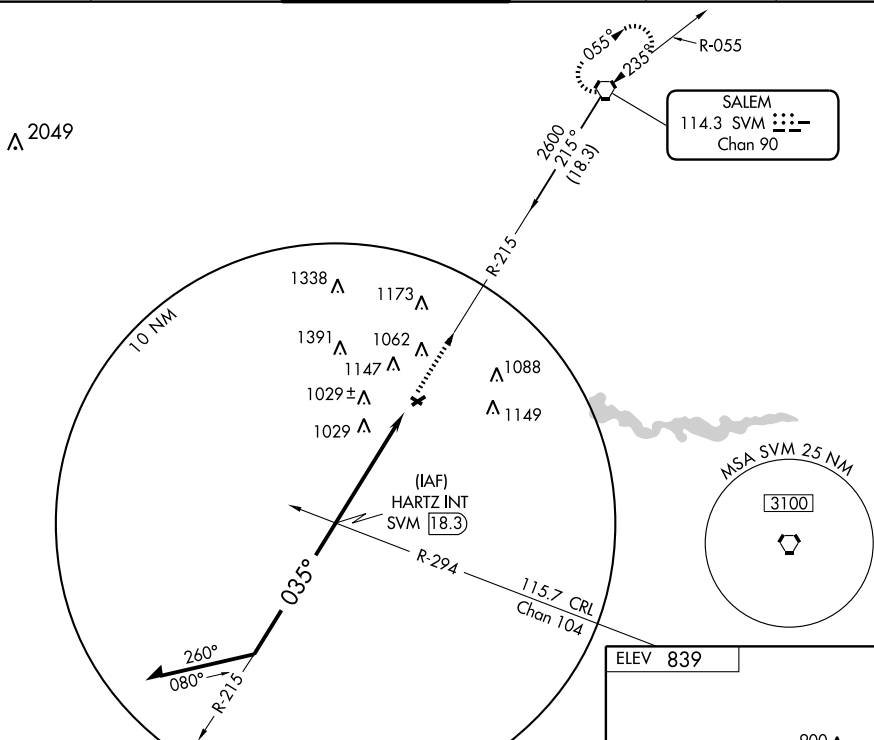
ATIS
134.55

DETROIT APP CON
118.95 363.2

ANN ARBOR TOWER ★
120.3 (CTAF) L

GND CON
121.6

CLNC DE
121,6

UNICOM
123.0

Remain
within 10 NM

HARTZ INT
SVM 18.3

3000

SVM

114,3

2600

- 21

240C

133

1

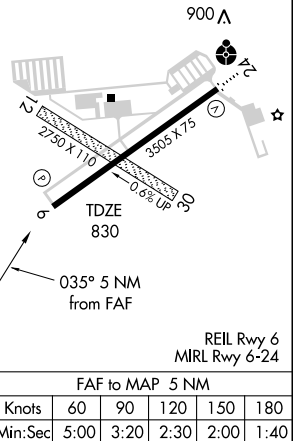
5 NM

CATEGORY	A	B	C	D
S-6	1320-1	490 (500-1)	1320-1¼ 490 (500-1¼)	1320-1½ 490 (500-1½)

CIRCLING	1500-1 661 (700-1)	1500-1 $\frac{3}{4}$ 661 (700-1 $\frac{3}{4}$)	1500-2 661 (700-2)
WILLOW RUN ALTITUDE SETTING MINIMUMS			

WILLOW RUN ALTIMETER SETTING MINIMUMS

S-6	1340-1 510 (600-1)	1340-2 510 (600-1½)	
CIRCLING	1520-1 681 (700-1)	1520-2 681 (700-2)	1520-2¼ 681 (700-2¼)



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC SVM 114.3 Chan 90	APP CRS 213°	Rwy Idg TDZE Apt Elev	3505 830 839
--	------------------------	-----------------------------	---

VOR RWY 24

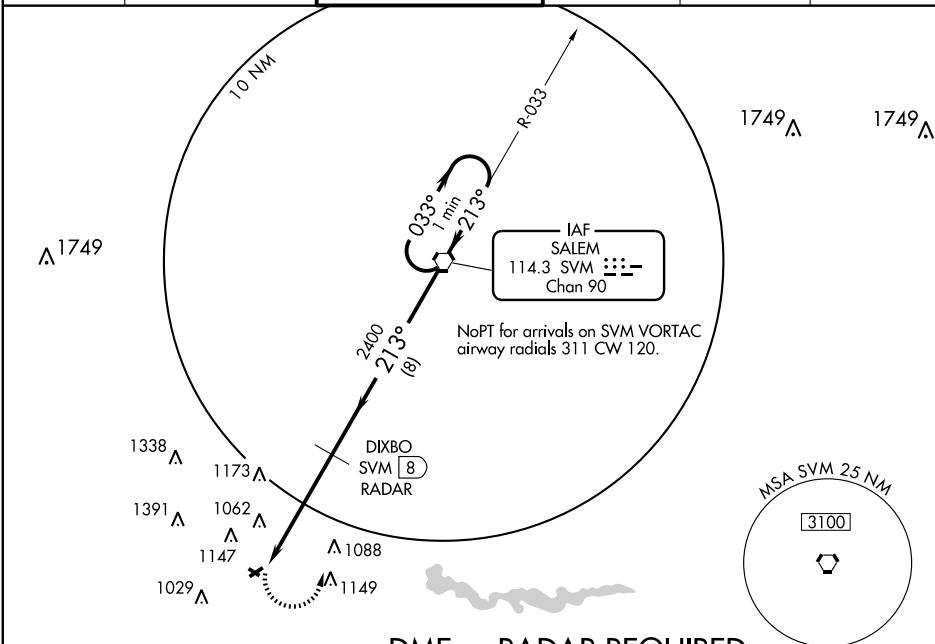
ANN ARBOR MUNI (ARB)

▼
▲ Inoperative table does not apply.
When control tower closed, use
Detroit Willow Run altimeter setting.

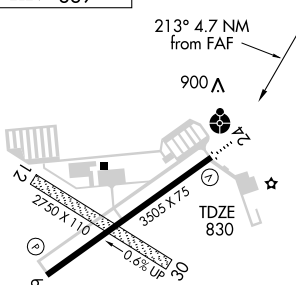


MISSED APPROACH: Climbing left turn
to 3000 direct SVM VORTAC and hold.

ATIS 134.55	DETROIT APP CON 118.95 363.2	ANN ARBOR TOWER ★ 120.3 (CTAF) 0	GND CON 121.6	CLNC DEL 121.6	UNICOM 123.0
-----------------------	--	---	-------------------------	--------------------------	------------------------



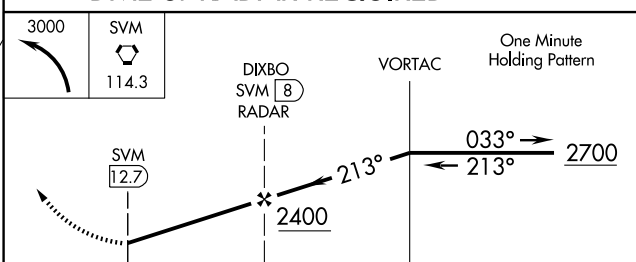
ELEV 839



MIRL Rwy 6-24
REIL Rwy 6

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-24	1460-1 630 (700-1)		1460-1¾ 630 (700-1¾)	1460-2 630 (700-2)
CIRCLING	1500-1 661 (700-1)		1500-1¾ 661 (700-1¾)	1500-2 661 (700-2)
WILLOW RUN ALTIMETER SETTING MINIMUMS				
S-24	1480-1 650 (700-1)		1480-1¾ 650 (700-1¾)	1480-2 650 (700-2)
CIRCLING	1520-1 681 (700-1)		1520-2 681 (700-2)	1520-2¼ 681 (700-2¼)

AVOCA (39G) 2 SE UTC-5(-4DT) N43°01.80' W82°40.16'

DETROIT

726 NOTAM FILE LAN

RWY 09-27: 2105X100 (TURF)

RWY 09: Thld dsplcd 267'. Road. Rgt tfc. **RWY 27:** Trees.

AIRPORT REMARKS: Attended irregularly. Ultralight ops at arpt. Rwy 09-27 and Rwy 09 dsplcd thld marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

TACKABERRY (07D) 2 W UTC-5(-4DT) N43°03.87' W82°43.43'

DETROIT

764 NOTAM FILE LAN

RWY 18-36: 2244X65 (TURF)

RWY 18: Brush. **RWY 36:** Thld dsplcd 1000'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 36 has 75' radio twr 200' from thld 130' left. Rwy 36 dsplcd thlds marked with 3 tires each side; Rwy 18-36 marked with tires. Rwy 18-36 NSTD LIRL; non-frangible mounting; variable spacing and NSTD lens. Lgts not for public use.

COMMUNICATIONS: CTAF 122.9

BAD AXE N43°47.02' W82°58.99'. NOTAM FILE BAX.

DETROIT

(T) **VORW/DME** 108.2 BAX Chan 19 at Huron Co Mem. 766/5W. **AWOS-3.**

L-28J, 31C

RCO 122.65 (LANSING RADIO)

BAD AXE

HURON CO MEM (BAX) 1 S UTC-5(-4DT) N43°46.81' W82°59.13'

DETROIT

763 B **FUEL** 100LL, JET A NOTAM FILE BAX

H-11A, L-28J, 31C

RWY 17-35: H5009X75 (ASPH) MIRL

IAP

RWY 17: REIL. PAPI(P4L). Trees.

RWY 35: REIL. PAPI(P4L). Trees.

RWY 04-22: H3495X75 (ASPH) S-16 MIRL (NSTD)

RWY 04: Thld dsplcd 300'. Railroad. **RWY 22:** Trees.

AIRPORT REMARKS: Attended 1330-2130Z±. Arpt unattended major holidays and Easter. Birds on and invof arpt. Rwy 04-22 has numerous cracks. Twy A CLOSED winter months. MIRL Rwy 04-22 and MIRL Rwy 17-35 opr dusk-0230Z±; to increase ints and after 0230Z± **ACTIVATE**—CTAF. **ACTIVATE** PAPI and REIL Rwy 17 and Rwy 35—CTAF. Rwy 04-22 NSTD MIRL; lgts last 2000' not split amber/white lens.

WEATHER DATA SOURCES: **AWOS-3** 108.2 BAX (989) 269-4137.

COMMUNICATIONS: CTAF/UNICOM 122.975

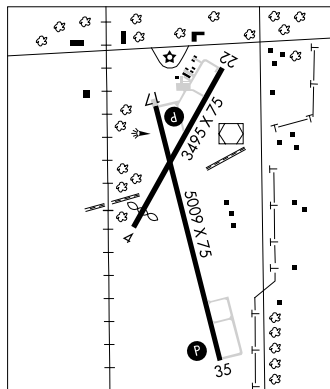
BAD AXE RCO 122.65 (LANSING RADIO)

® **CLEVELAND CENTER APP/DEP CON** 127.7

RADIO AIDS TO NAVIGATION: NOTAM FILE BAX.

BAD AXE (T) VORW/DME 108.2 BAX Chan 19 N43°47.02'

W82°58.99' at fld. 766/5W. **AWOS-3.**



APP CRS **033°**
Rwy ldg **3195**
TDZE **763**
Apt Elev **763**

RNAV (GPS) RWY 4

BAD AXE / HURON COUNTY MEMORIAL (BAX)

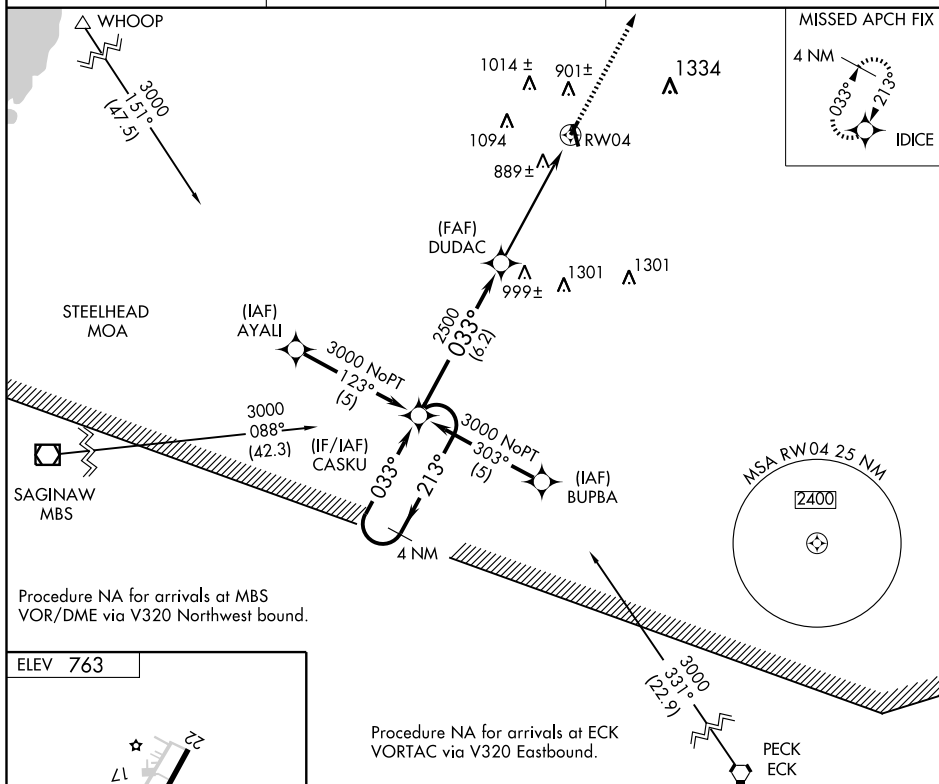
▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use MBS INTL altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 3000 direct IDICE and hold.

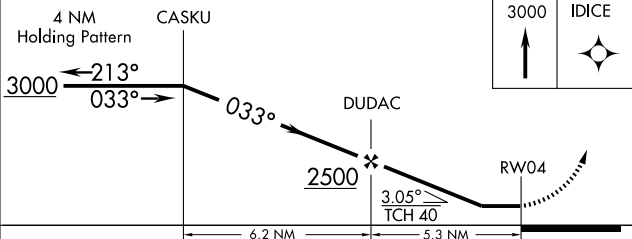
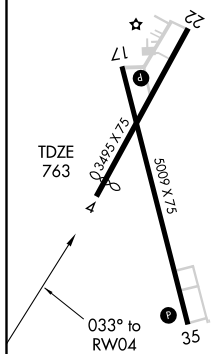
AWOS-3
108.2

CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) 0



ELEV **763**



CATEGORY	A	B	C	D
LNAV MDA	1140-1 377 (400-1)			NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

WAAS
CH **69205**
W17A

APP CRS
170°

Rwy Idg
TDZE **763**
Apt Elev **763**

RNAV (GPS) RWY 17

BAD AXE / HURON COUNTY MEMORIAL (B.A.X.)

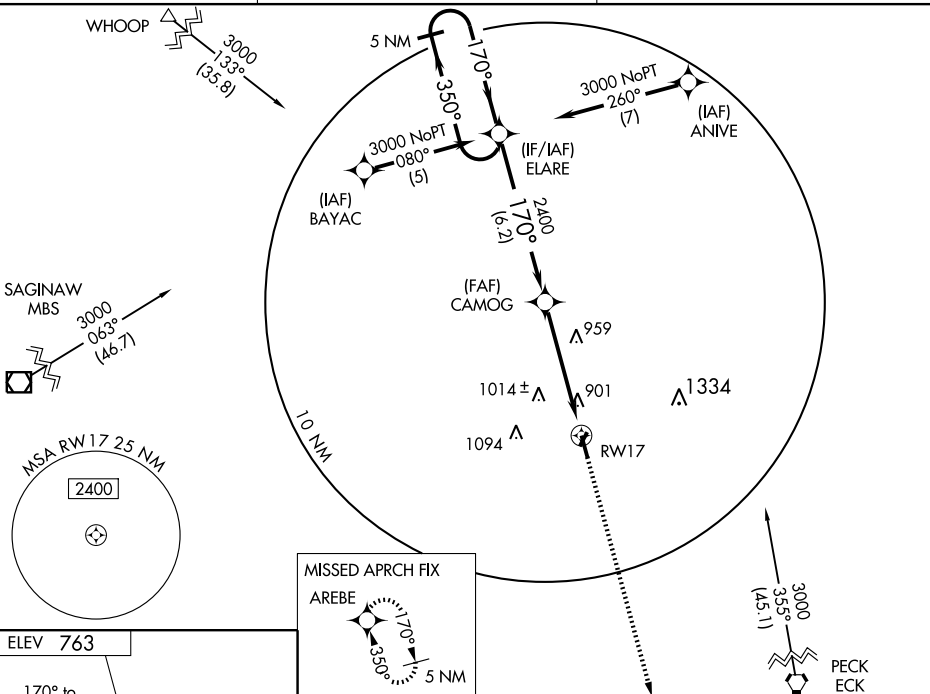
When VGSI inop, procedure NA at night. DME/DME RNP-0.3 NA. Baro-VNAV NA when using Saginaw Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.6°C (4°F) or above 54°C (130°F). Visibility reduction by helicopters NA. If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all DAs 129 feet and all MDAs 140 feet.

MISSED APPROACH: Climb to 3000 direct AREBE and hold.

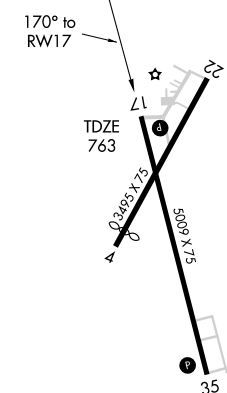
AWOS-3
108.2

CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) 0



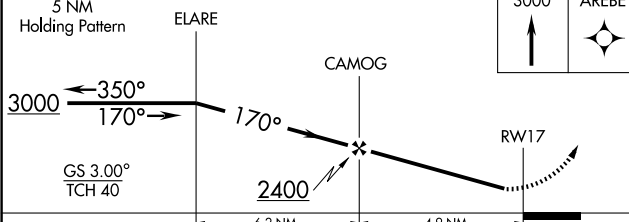
ELEV **763**



MISSED APRCH FIX



5 NM
Holding Pattern



CATEGORY	A	B	C	D
LPV DA	1075-1	312 (400-1)		NA
LNAV/VNAV DA	1352-2	589 (600-2)		NA
LNAV MDA	1220-1	457 (500-1)	1220-1¼ 457 (500-1¼)	NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

REIL Rwy 17 and 35 0
MIRL Rwy 4-22 and 17-35 0

APP CRS **213°**
 Rwy Idg **3495**
 TDZE **763**
 Apt Elev **763**

RNAV (GPS) RWY 22

BAD AXE / HURON COUNTY MEMORIAL (B.A.X.)

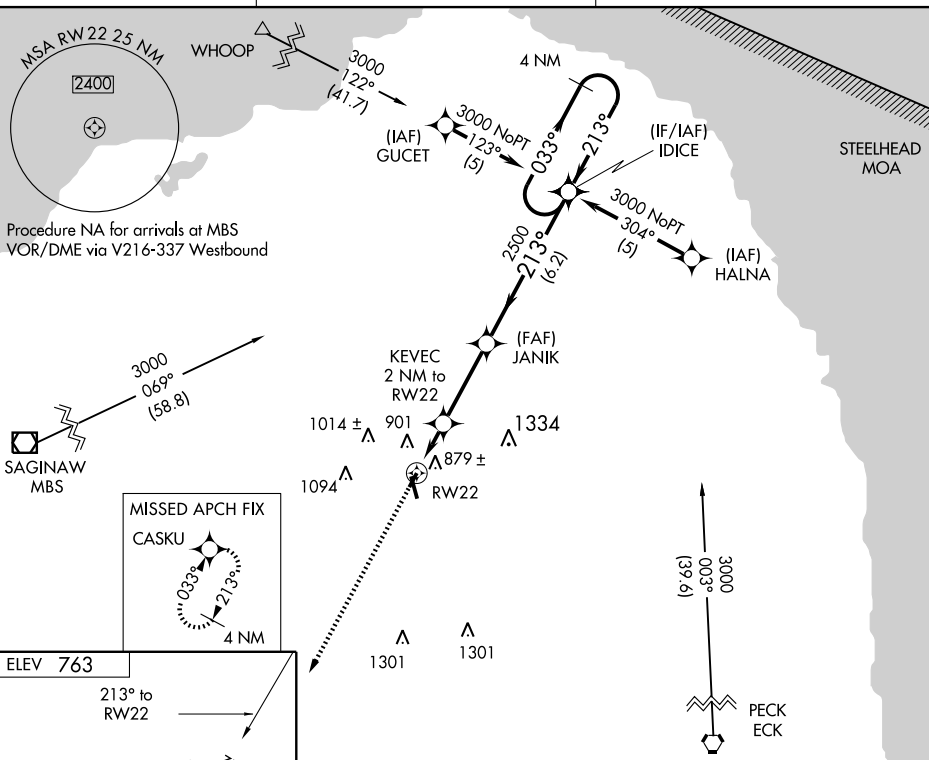
V DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
A When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 3000 direct CASKU and hold.

AWOS-3
108.2

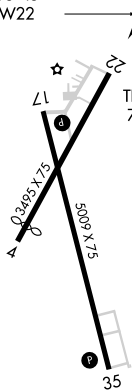
CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) 0



ELEV **763**

213° to RW22








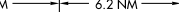
REIL Rwy 17 and 35 **0**
 MRL Rwy 4-22 and 17-35 **0**

BAD AXE, MICHIGAN
 Orig 09295

BAD AXE / HURON COUNTY MEMORIAL (B.A.X.)

43°47'N - 82°59'W

RNAV (GPS) RWY 22

3000	CASKU	4 NM Holding Pattern			
		KEVEC 2 NM to RW22	JANIK	IDICE	
					
		1440	2500		3000
		3.05° TCH 40	213°	033° → ← 213°	
CATEGORY	A	B	C	D	
LNAV MDA	1140-1 377(400-1)				NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA	

WAAS CH 62805 W35A	APP CRS 350°	Rwy Idg TDZE 756 Apt Elev 763	5009 756 763
--	------------------------	---	---

RNAV (GPS) RWY 35

BAD AXE / HURON COUNTY MEMORIAL (BAX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). VDP and Baro/VNAV NA when using Saginaw Intl altimeter setting. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all DA's 129 feet and all MDAs 140 feet.

MISSED APPROACH: Climb to 3000 direct ELARE and hold.

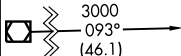
AWOS-3 108.2	CLEVELAND CENTER 127.7 307.8	UNICOM 122.975 (CTAF) ①
------------------------	--	-----------------------------------

MISSED APRCH FIX

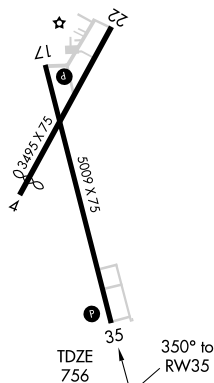


Procedure NA for arrivals on MBS VOR/DME via V320 northwest bound.

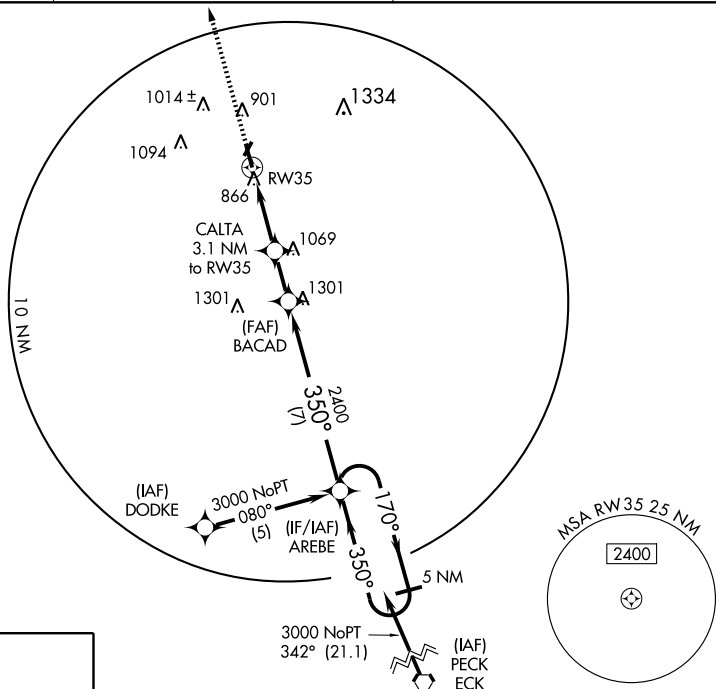
SAGINAW MBS


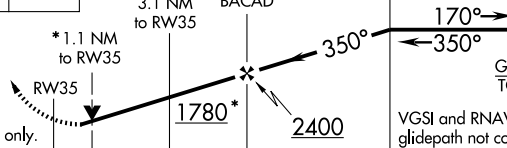


ELEV 763



REIL Rwy 17 and 35 ①
MIRL Rwy 4-22 and 17-35 ①



3000 ↑	ELARE 	5 NM Holding Pattern		
				
CATEGORY	A	B	C	D
LPV DA	1113-1¼	357 (400-1¼)		NA
LNAV/ VNAV DA	1154-1½	398 (400-1½)		NA
LNAV MDA	1120-1	364 (400-1)		NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

VOR/DME BAX 108.2 Chan 19	APP CRS 039°	Rwy Idg 3195 TDZE 763 Apt Elev 763
---	------------------------	---

VOR RWY 4

BAD AXE / HURON COUNTY MEMORIAL (BAX)

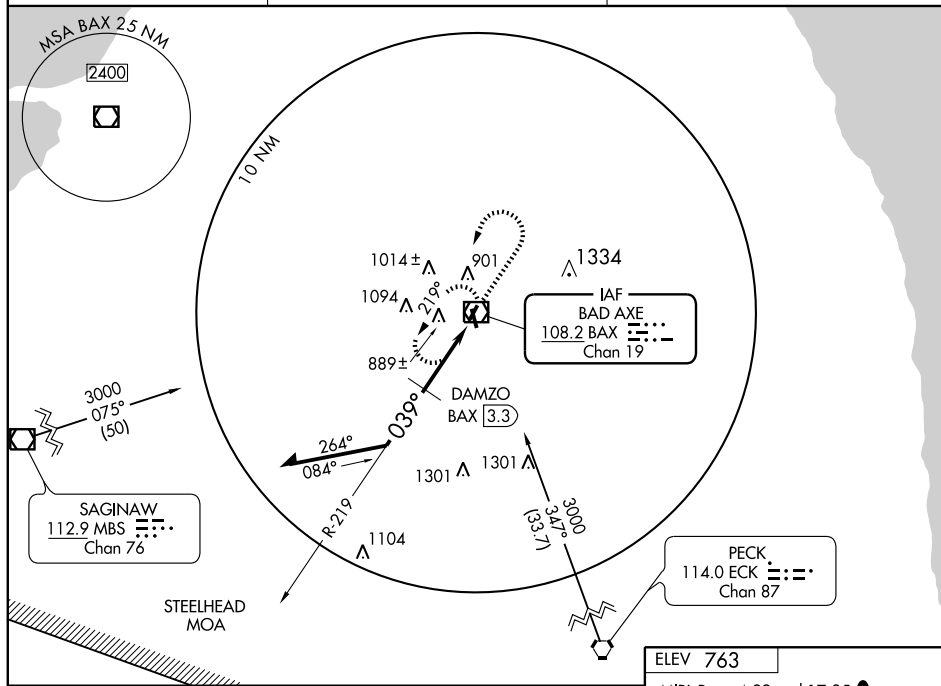
T Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDAs 140 feet, and Cat B visibility $\frac{1}{4}$ mile, Cat C visibility $\frac{1}{2}$ mile, and DAMZO fix minimums visibility Cat C $\frac{1}{2}$ mile.

MISSED APPROACH: Climb to 2400 then left turn direct BAX VOR/DME and hold.

AWOS-3
108.2

CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) **L**



Remain
within 10 NM

VOR/DME

2400

BAX

2400

DAMZO
BAX 3.3

20.

*1600 when using MBS Intl altimeter setting.

CATEGORY

A

B

C

C

S-4

1460-1 697 (700-1)

1460-2

NA

CIRCLING

1460-1 697 (700-1)

1460-2

NA

DAMZO FIX MINIMUMS

S-4

1140-1 377 (400-1)

Na

CIRCLING

1300-

1320

1320-1½

1

BAD AXE, MICHIGAN

Amdt 11 09295

BAD AXE / HURON COUNTY MEMORIAL (BAX)

VOR RWY 4

43°47'N - 82°59'W

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME BAX 108.2 Chn 19	APP CRS 207°	Rwy Idg 3495 TDZE 763 Apt Elev 763
--	------------------------	---

VOR RWY 22

BAD AXE / HURON COUNTY MEMORIAL (BAX)

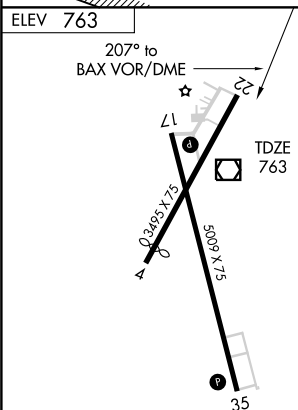
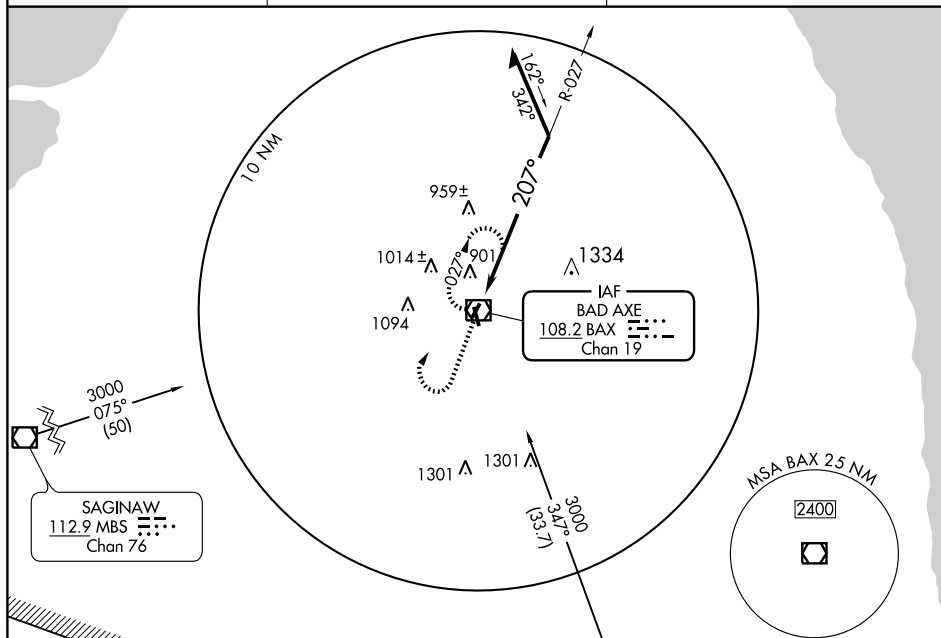
▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 2400 then right turn direct BAX VOR/DME and hold.

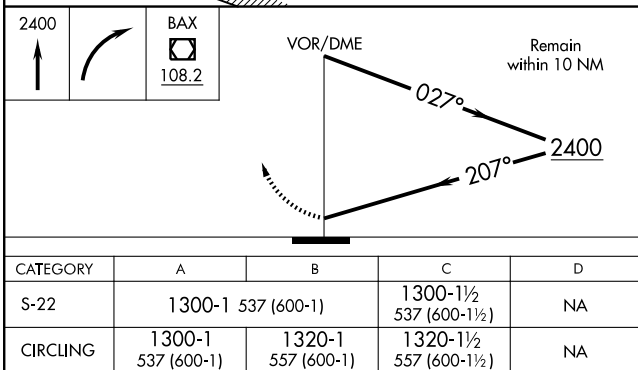
AWOS-3
108.2

CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) **L**



REIL Rwys 17 and 35 **L**
MIRL Rwys 4-22 and 17-35 **L**



BAD AXE, MICHIGAN
Amdt 10 09295

BAD AXE / HURON COUNTY MEMORIAL (BAX)

43°47'N - 82°59'W

VOR RWY 22

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

VOR/DME BAX 108.2 Chan 19	APP CRS 358°	Rwy Idg TDZE 756 Apt Elev 763
--	------------------------	---

VOR RWY 35

BAD AXE / HURON COUNTY MEMORIAL (BAX)

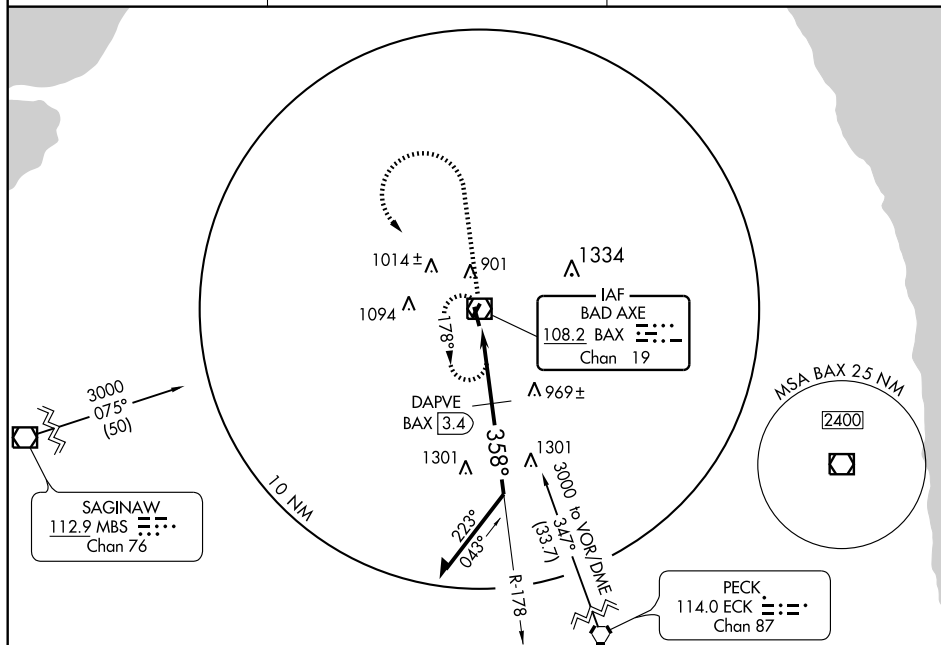
▼ If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDAs 140 feet.
 ▲ NA Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2400 then left turn direct BAX VOR/DME and hold.

AWOS-3
108.2

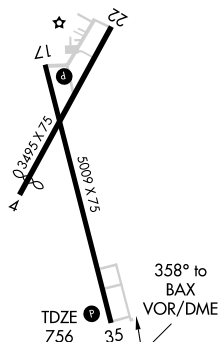
CLEVELAND CENTER
127.7 307.8

UNICOM
122.975 (CTAF) **0**



ELEV 763

MIRL Rwy 4-22 and 17-35 **L**
 REIL Rwy 17 and 35 **L**



2400



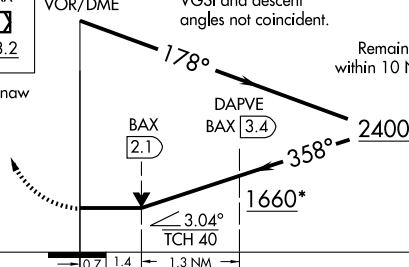
BAX
108.2

* 1800 when using Saginaw Intl altimeter setting.

VOR/DME

VGSI and descent angles not coincident.

Remain within 10 NM



CATEGORY	A	B	C	D
S-35	1660-1¼ 904 (900-1¼)	1660-2¾ 904 (900-2¾)	1660-2¾ 904 (900-2¾)	NA
CIRCLING	1660-1¼ 897 (900-1¼)	1660-2¾ 897 (900-2¾)	1660-2¾ 897 (900-2¾)	NA
DAPVE FIX MINIMUMS				
S-35	1220-1 464 (500-1)	1220-1¼ 464 (500-1¼)	1220-1¼ 464 (500-1¼)	NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

BALDWIN MUNI (7D3) 2 S UTC-5(-4DT) N43°52.53' W85°50.53'

CHICAGO

828 NOTAM FILE LAN

L-281

RWY 09-27: H3800X75 (ASPH) S-10 0.3% up E

IAP

RWY 09: Trees. RWY 27: Trees.

RWY 05-23: 2800X100 (TURF)

RWY 05: Thld dspcd 800'. Trees.

RWY 23: Thld dspcd 800'. Trees.

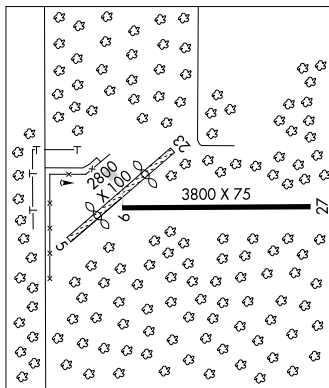
AIRPORT REMARKS: Unattended. Deer on and invof arpt. Arpt CLOSED Nov thru Apr; no snow removal. Rwy 09-27 sfc considerable pavement cracking with vegetation growing through cracks. Rwy 05-23 and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

① MINNEAPOLIS CENTER APP/DEP CON 120.85

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'
W85°42.97' 344° 18.9 NM to fld. 920/1W.

**BANGU** N45°00.88' W84°48.48'. NOTAM FILE GLR.

LAKE HURON

NDB (LOM) 375 GL 097° 4.4 NM to Gaylord Rgnl.

BARAGA (2P4) 4 W UTC-5(-4DT) N46°47.10' W88°34.67'

GREEN BAY

845 NOTAM FILE GRB

RWY 09-27: 2200X100 (TURF)

RWY 09: Thld dspcd 700'. Trees. RWY 27: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Apr except to ski equipped acct. 25' p-line 850' from thld Rwy 27. Deer and birds on and invof arpt. Rwy 09-27 and dspcd thld Rwy 09 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**BATH****UNIVERSITY AIRPARK** (41G) 2 NW UTC-5(-4DT) N42°50.42' W84°28.75'

DETROIT

856 B S2 NOTAM FILE LAN

RWY 08-26: 1988X100 (TURF) LIRL

RWY 08: Bldg. RWY 26: Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 08-26 occasionally soft/wet areas E end during spring thaw and after heavy rain. ACTIVATE LIRL Rwy 08-26 and NSTD rotating bcn-122.85. NSTD flashing strobe and alternating white/red bcn. Rwy 08-26 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**BATOL** N42°21.72' W85°11.06' NOTAM FILE BTL.

CHICAGO

NDB (MHW/LOM) 272 BT 226° 4.4 NM to W K Kellogg.

L-281

BATTLE CREEK N42°18.59' W85°15.14' NOTAM FILE BTL.

CHICAGO

(T) VORTACW 109.4 BTL Chan 31 at W K Kellogg. 922/2W.

L-281

VOR portion unusable 095°-112° byd 16 NM; 125°-170° and 235°-260° blo 4000'.

RCO 122.2 (LANSING RADIO)

VOR/DME HIC 117.6 Chan 123	APP CRS 345°	Rwy Idg TDZE Apt Elev	N/A N/A 828
--	------------------------	-----------------------------	--

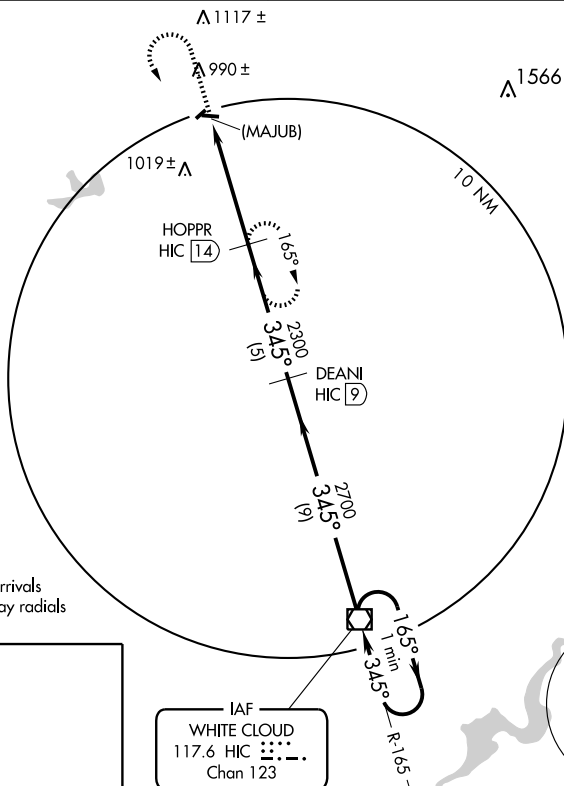
VOR/DME or GPS-A
BALDWIN MUNI (7D3)

T	Use Manistee altimeter setting.
A NA	Procedure not authorized at night.

MISSED APPROACH: Climb to 2600, then left turn via the HIC VOR/DME R-345 to HOPPR/14 DME and hold.

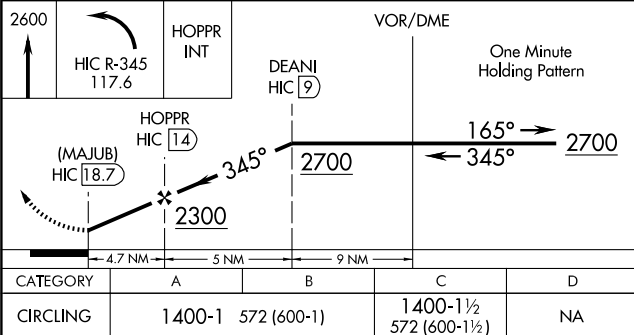
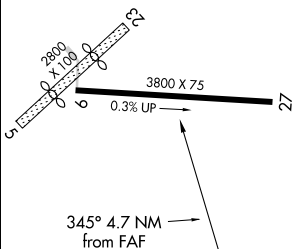
MINNEAPOLIS CENTER
120.85 322.35

CTAF
122.9



No procedure turn for arrivals
on HIC VOR/DME airway radials
087 CW 211.

ELEV 828

BALDWIN, MICHIGAN
Amdt 1 09295

43°53'N - 85°51'W

BALDWIN MUNI (7D3)
VOR/DME or GPS-A

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

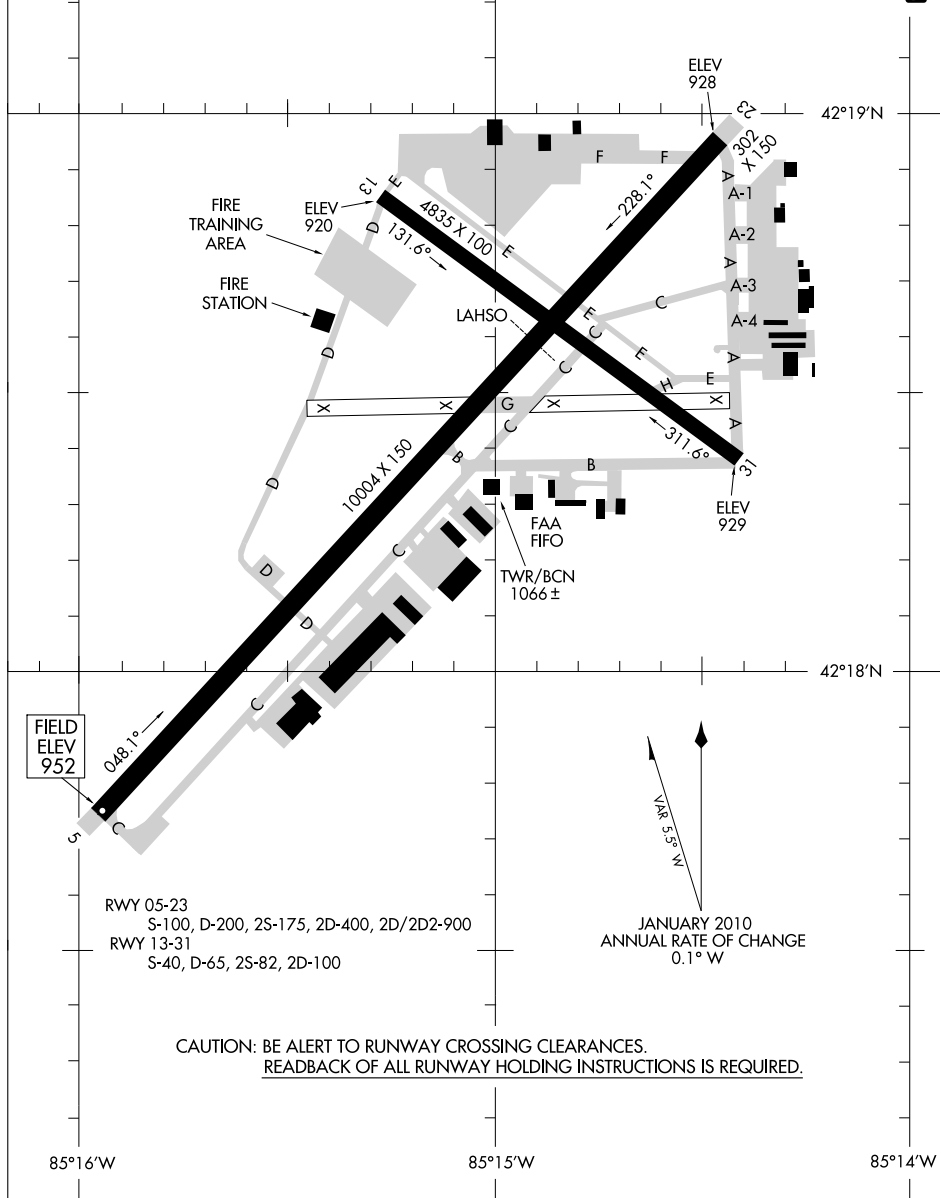
AL-41 (FAA)

BATTLE CREEK/ W.K. KELLOGG (BTL.)
BATTLE CREEK, MICHIGAN

ATIS
128.325
BATTLE CREEK TOWER*
126.825 239.025
GND CON
121.7 256.875

D

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

BATTLE CREEK, MICHIGAN
BATTLE CREEK/ W.K. KELLOGG (BTL.)

BATTLE CREEK**W K KELLOGG**

(BTL) 3 W UTC-5(-4DT) N42°18.44' W85°15.09'

952 B S4 FUEL 100LL, JET A OX 3 LRA Class IV, ARFF Index A

NOTAM FILE BTL

RWY 05-23: H10004X150 (ASPH-PFC) S-100, D-200, 2S-175,
2D-400, 2D/2D2-900 HIRL

RWY 05: REIL. VASI(V4L)—GA 3.0° TCH 49'. Tree. 0.4% down.

RWY 23: MALSR. PAPI(P4L). Pole.

RWY 13-31: H4835X100 (ASPH-GRVD) S-40, D-65, 2S-82,
2D-100 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 35'. Railroad.

RWY 31: REIL. VASI(V4L)—GA 3.0° TCH 56'. Road.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 05	13-31	7000

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-10003 TODA-10003 ASDA-10003 LDA-10003

RWY 13: TORA-4835 TODA-4835 ASDA-4835 LDA-4835

RWY 23: TORA-10003 TODA-10003 ASDA-10003 LDA-10003

RWY 31: TORA-4835 TODA-4835 ASDA-4835 LDA-4835

AIRPORT REMARKS: Attended continuously. 48 hr PPR for unscheduledair carrier ops with more than 30 passenger seats call arpt
manager 269-966-3470. Deer and birds on and invof arpt.

Extensive pilot training within 25 NM of BTL VOR. When twr clsd HIRL Rwy 05-23 preset low ints. To increase
ints and ACTIVATE MALSR Rwy 23, MIRL Rwy 13-31 and REIL Rwy 05, Rwy 13 and Rwy 31—CTAF. ARFF
provided 24 hrs call 269-969-3349/3317. Index C ARFF avbl on request 48 hrs PPR call 269-966-3470. For
customs call 269-965-3349.

WEATHER DATA SOURCES: ASOS (269) 964-0283. LAWRS.**COMMUNICATIONS:** CTAF 126.825 ATIS 128.325 UNICOM 122.95

BATTLE CREEK RCD 122.2 (LANSING RADIO)

® KALAMAZOO APP/DEP CON 119.2 (1100-0400Z‡)

® CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

BATTLE CREEK TOWER 126.825 (1100-0300Z‡) GND CON 121.7

AIRSPACE: CLASS D svc effective 1100-0300Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59' W85°15.14' at fld. 922/2W..

BATOL NDB (MHW/LOM) 272 BT N42°21.72' W85°11.06' 226° 4.4 NM to fld.

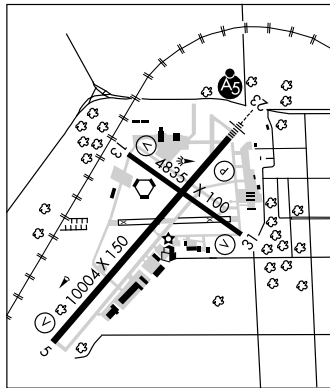
ILS 110.5 I-BTL Rwy 23. Class IB. LOM BATOL NDB. Unmonitored when twr clsd.

ASR (1100-0400Z‡)

CHICAGO

H-5E, 10F, L-28I

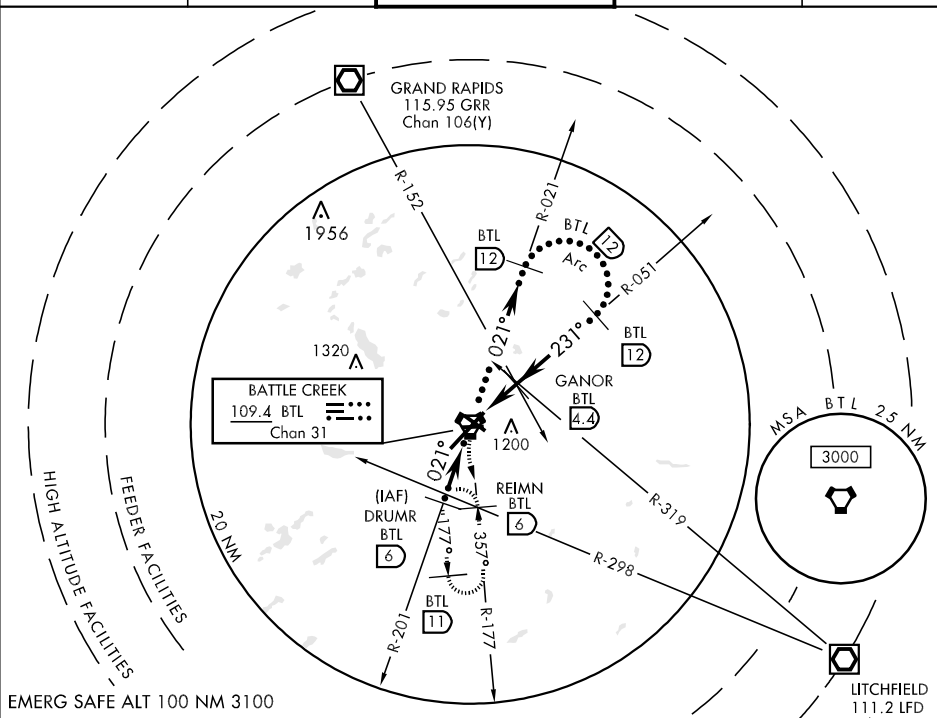
IAP, AD



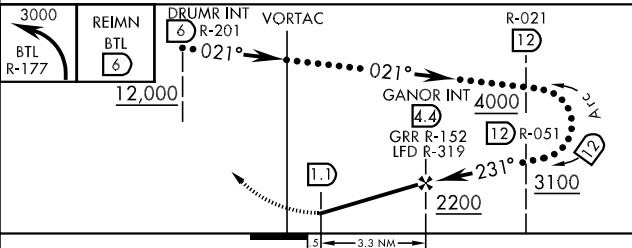
BATTLE CREEK/W. K. KELLOGG (KBTL)

MISSED APPROACH: Climbing left turn to 3000
via BTL VORTAC R-177 to REIMN Int and hold.

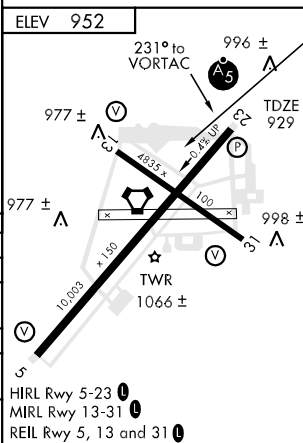
ASR



EMERG SAFE ALT 100 NM 3100



CATEGORY	C	D	E
S-23	1380/40 451(500-¾)	1380/50 451 (500-1)	
CIRCLING	1480-1½ 528 (600-1½)	1520-2 568 (600-2)	1740-2¾ 788 (800-2¾)
GRAND RAPIDS ALTIMETER SETTING MINIMUMS			
S-23	1540-1¼ 611 (700-1¼)	1540-1½ 611 (700-1½)	1540-1¾ 611 (700-1¾)
CIRCLING	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)	1900-3 948 (1000-3)



BATTLE CREEK/W. K. KELLOGG (KBTL)

Amdt 6 09015

HI-TACAN RWY 23

LOC I-BTL	APP CRS	Rwy Idg	10003
<u>110.5</u>	227°	TDZE	929
		Apt Elev	952

ILS or LOC RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)

T When control tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting.
A
ASR * RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALS

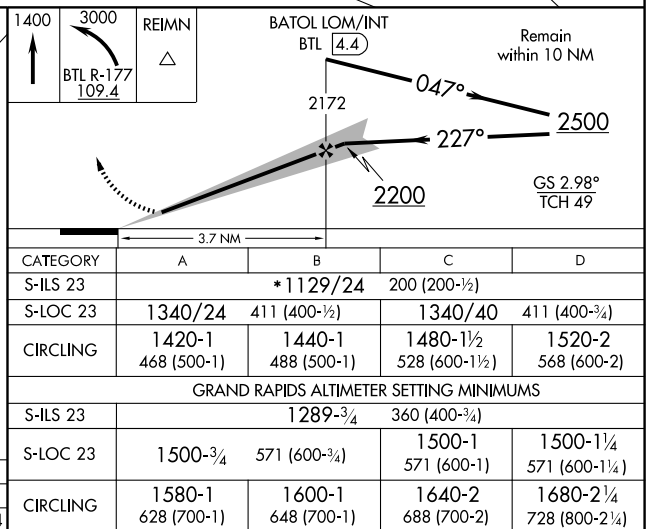
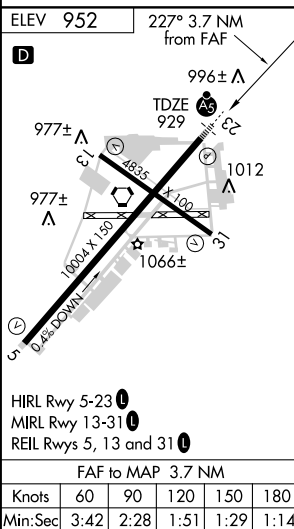
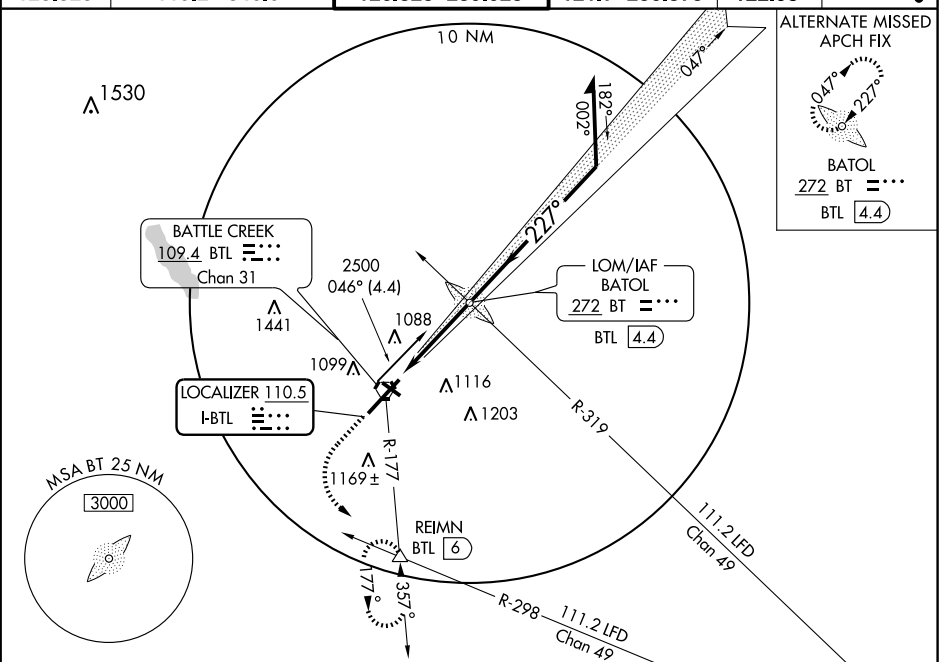
MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 via BTL R-177 to REIMN Int/BTL 6 DME and hold.

ATIS
128,325

KALAMAZOO APP CON ★
119.2 340.9

BATTLE CREEK TOWER ★
126,825 239,025

GND CON
121.7 256.875

UNICOM
122.95CTAF
126.825 L

BATTLE CREEK, MICHIGAN

Amdt 17C 10042

BATTLE CREEK / W K KELLOGG (RTL)

ILS or LOC RWY 23

42°18'N - 85°15'W



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1 26 AUG 2010 to 23 SEP 2010

LOM BT	APP CRS	Rwy Idg	10003
<u>272</u>	227°	TDZE	929
		Apt Elev	952

NDB RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)

	When control tower closed, except for operators with
 NA	approved weather reporting service, use Grand Rapids
ASR	altimeter setting.

MALSR
A5

MISSED APPROACH: Climbing left turn to 3000 via BTL R-177 to REIMN Int/BTL 6 DME and hold.

ATIS
128,325

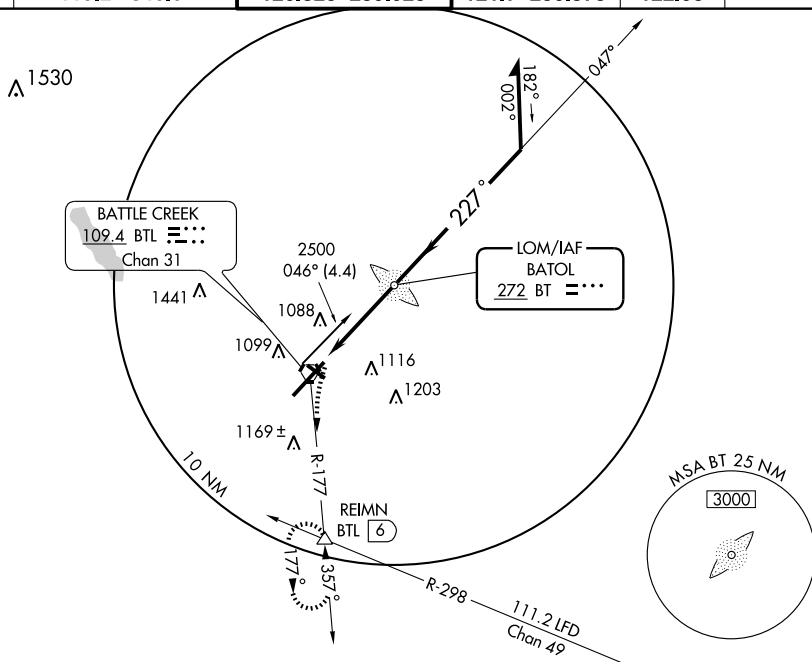
KALAMAZOO APP CON ★
119.2 340.9

BATTLE CREEK TOWER ★
126.825 239.025

GND CON
121.7 256.875

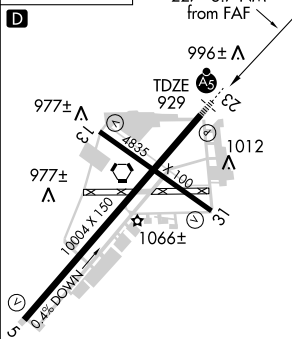
UNICOM
122.95

CTAF
126.825 **L**



ELEV	952
------	-----

227° 3.7 NM





HIRL Rwy 5-23 **L**
MIRL Rwy 13-31 **L**
REIL Rwy 5, 13 and 31 **L**

FAF to MAP 3.7 NM

Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

BATTLE CREEK, MICHIGAN

Amdt 17 10042

3000  BTL R-177 <u>109.4</u>	REIMN 
--	--

LOM

within 10 NM

[illegible]

250

250

2200

← 3.7 NM →

CATEGORY	A	B	C	D
S-23	1440/40	511 (500-¾)	1440/50 511 (500-1)	1440/60 511 (500-1¼)
CIRCLING	1440-1	488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)

GRAND RAPIDS ALTIMETER SETTING MINIMUMS

S-23	1600- $\frac{3}{4}$ 671 (700- $\frac{3}{4}$)	1600- $\frac{1}{2}$ 671 (700- $\frac{1}{2}$)	1600-2 671 (700-2)
CIRCLING	1600-1 648 (700-1)	1640-2 688 (700-2)	1680- $\frac{2}{4}$ 728 (800- $\frac{2}{4}$)

BATTLE CREEK / W.K. KELLOGG (BTL)

NDB RWY 23

WAAS CH 90311 W05A	APP CRS 047°	Rwy Idg 10003 TDZE 952 Apt Elev 952
--	------------------------	--

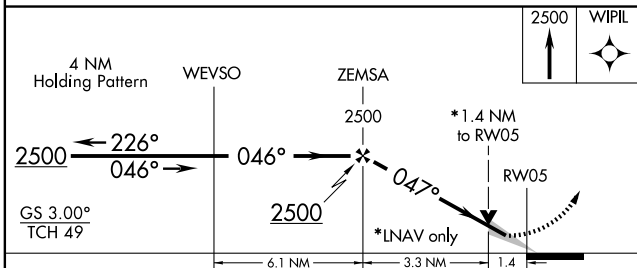
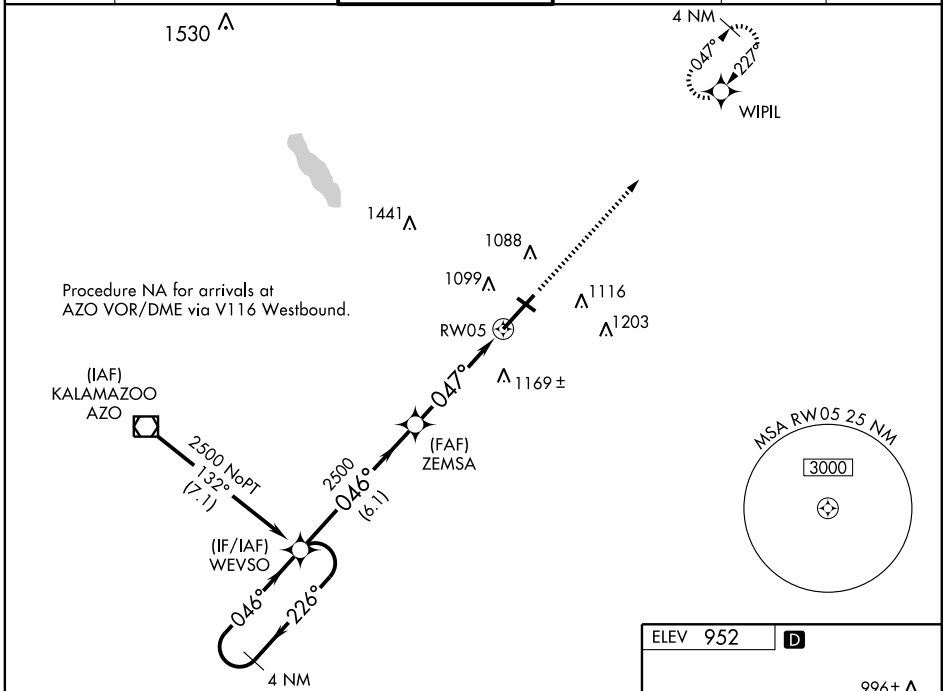
RNAV (GPS) RWY 5

BATTLE CREEK / W.K. KELLOGG (BTL)

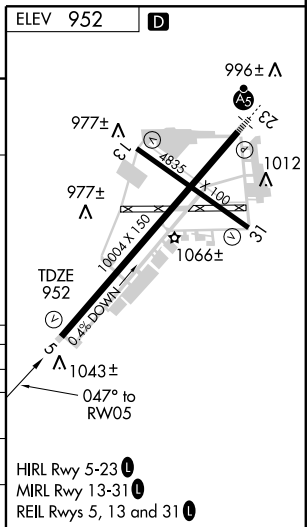
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase LPV DA 107 feet, LNAV/VNAV DA 236 feet, and all MDA 120 feet, increase LPV visibility ½ mile all Cats, and LNAV/VNAV visibility ¾ mile all Cats, LNAV Cat C and D visibility ½ mile, Circling Cat C and D visibility ¼ mile. VDP and Baro-VNAV NA when using Grand Rapids altimeter setting.

MISSED APPROACH:
Climb to 2500 direct
WIPIL and hold.

ATIS 128.325	KALAMAZOO APP CON ★ 119.2 340.9	BATTLE CREEK TOWER ★ 126.825 239.025	GND CON 121.7 256.875	UNICOM 122.95	CTAF 126.825 0
-----------------	------------------------------------	---	--------------------------	------------------	-------------------



CATEGORY	A	B	C	D
LPV DA	1262-1 310 (400-1)			
LNAV/ VNAV DA	1328-1¼ 376 (400-1¼)			
LNAV MDA	1440-1 488 (500-1)		1440-1¼ 488 (500-1¼)	1440-1½ 488 (500-1½)
CIRCLING	1440-1 488 (500-1)	1500-1 548 (600-1)	1500-1½ 548 (600-1½)	1520-2 568 (600-2)



VORTAC BTL	APP CRS	Rwy Idg	4835
109.4	300°	TDZE	930
Chan 31		Apt Elev	952

VOR or TACAN or GPS RWY 31

BATTLE CREEK / W.K. KELLOGG (BTL)

▼	When control tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting and increase all MDAs 160 feet and all visibilities $\frac{3}{4}$ mile.
▲	Air carrier landing visibility reduction for local conditions not authorized.
ASR	

MISSED APPROACH: Climbing right turn to 3000 via BTL R-333 to HEBEL Int/BTL 9.9 DME and hold.

ATIS
128.325

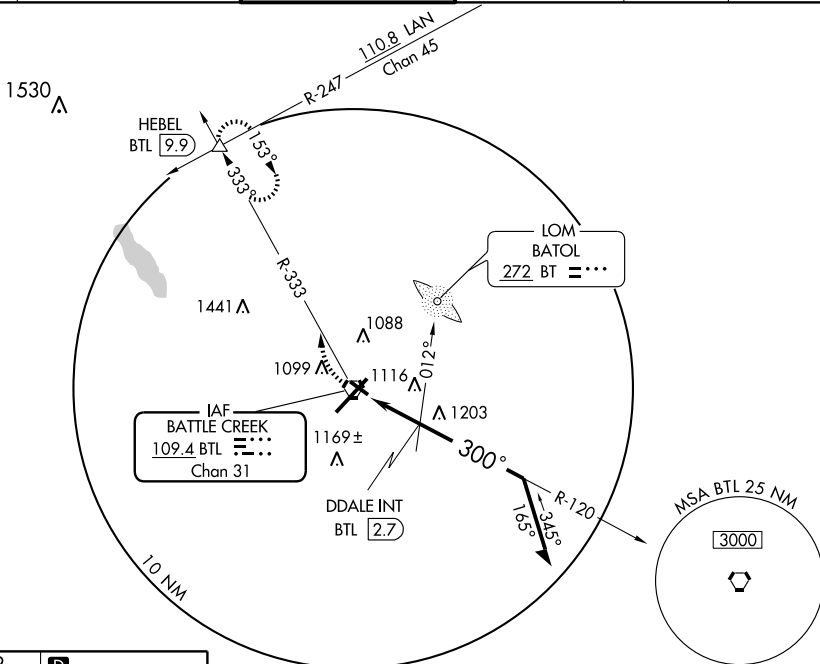
KALAMAZOO APP CON ★
119.2 340.9

BATTLE CREEK TOWER ★
126,825 239,025

GND CON
121.7 256.875

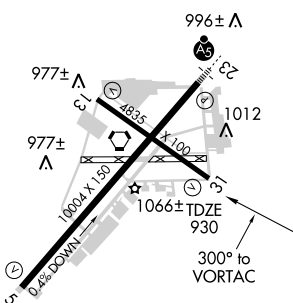
UNICOM
122.95

CTAF
126.825 **L**

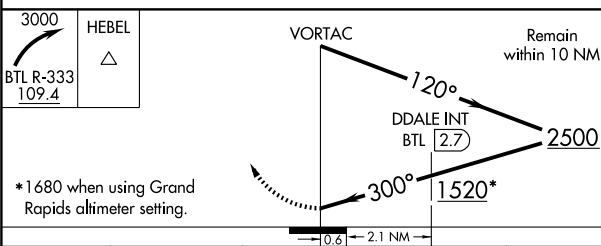


ELEV 952

D



HIRL Rwy 5-23 **L**
MIRL Rwy 13-31 **L**
REIL Rwy 5, 13 and 31 **L**



CATEGORY	A	B	C	D
S-31	1520-1	590 (600-1)	1520-1½ 590 (600-1½)	1520-1¾ 590 (600-1¾)
CIRCLING	1520-1	568 (600-1)	1520-1½ 568 (600-1½)	1520-2 568 (600-2)
DDALE MINIMUMS				
S-31	1380-1	450 (500-1)	1380-1¼ 450 (500-1¼)	1380-1½ 450 (500-1½)
CIRCLING	1420-1 468 (500-1)	1440-1 488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)

BATTLE CREEK, MICHIGAN
Amdt 14 10042

42°18'N - 85°15'W

BATTLE CREEK / W.K. KELLOGG (BTL)

VOR or TACAN or GPS RWY 31

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC BTL 109.4 Chan 31	APP CRS 040°	Rwy Idg 10003 TDZE 952 Apt Elev 952
--	------------------------	--

VOR or TACAN RWY 5
BATTLE CREEK / W.K. KELLOGG (BTL)

T	When control tower closed, except for
A	operators with approved weather reporting
ASR	service, use Grand Rapids altimeter setting.

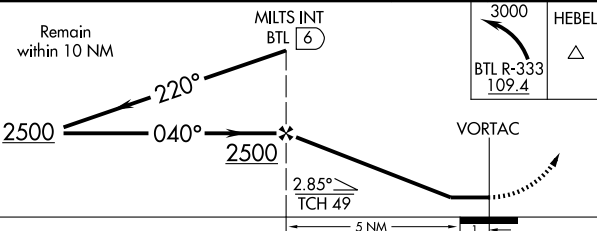
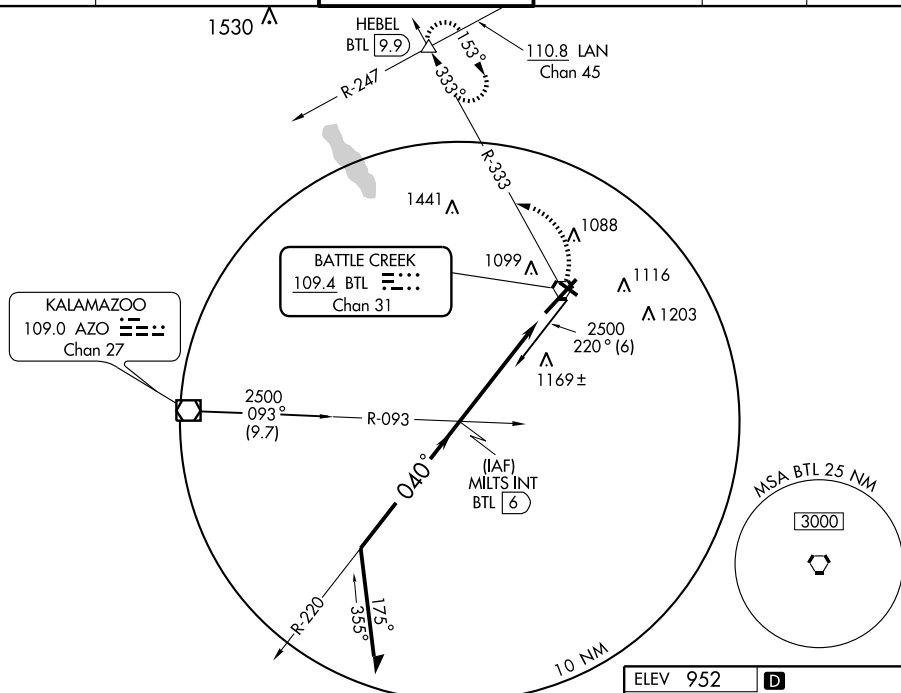
MISSED APPROACH: Climbing left turn to 3000 via BTL R-333 to HEBEL Int/BTL 9.9 DME and hold.

ATIS
128,325

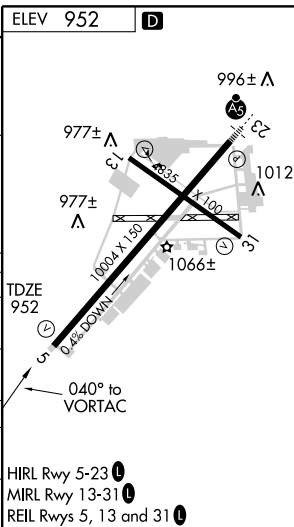
KALAMAZOO APP CON ★
119.2 340.9

BATTLE CREEK TOWER ★
126.825 239.025

GND CON
121.7 256.875

UNICOM
122.95CTAF
126.825 L

CATEGORY	A	B	C	D
S-5	1400-1	448 (500-1)	1400-1¼ 448 (500-1¼)	1400-1½ 448 (500-1½)
CIRCLING	1420-1 468 (500-1)	1440-1 488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)
GRAND RAPIDS ALTIMETER SETTING MINIMUMS				
S-5	1560-1	608 (700-1)	1560-1¾ 608 (700-1¾)	1560-2 608 (700-2)
CIRCLING	1580-1 628 (700-1)	1600-1 648 (700-1)	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)

BATTLE CREEK, MICHIGAN
Amdt 19A 10042

BATTLE CREEK / W.K. KELLOGG (BTL)
VOR or TACAN RWY 5

42°18'N - 85°15'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



VORTAC BTL
109.4
 Chan 31

APP CRS
231°

Rwy Idg **10003**
 TDZE **929**
 Apt Elev **952**

VOR RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)

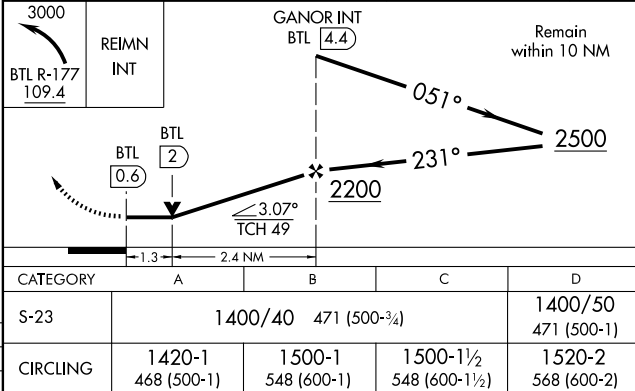
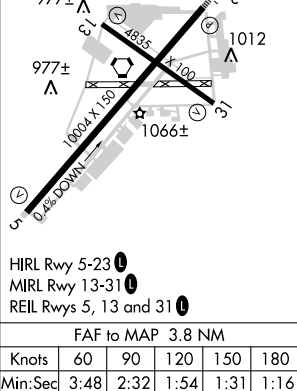
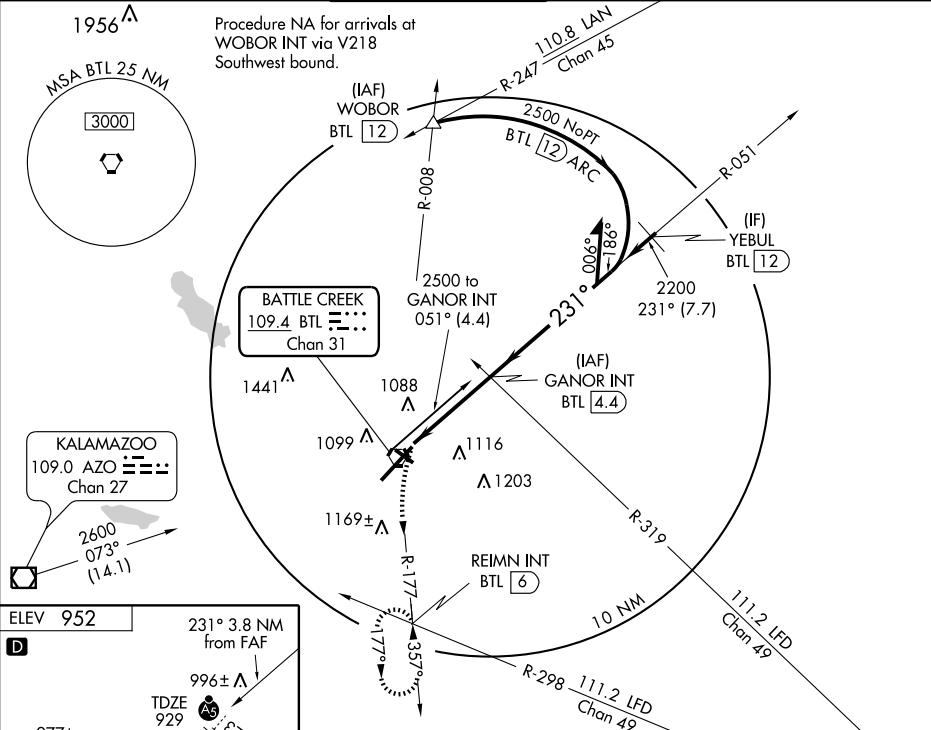
 For inoperative MALS, increase S-23 Cats A/B visibility to RVR 5000.
 Visibility reduction by helicopters NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 120 feet, increase Cat C visibility to RVR 5000, Cat D visibility to RVR 6000, and Circling Cat C and D visibility ¼ mile. VDP NA when using Grand Rapids altimeter setting.

MALS



MISSED APPROACH:
 Climbing left turn to 3000
 via BTL VORTAC R-177
 to REIMN INT/6 DME and hold,
 continue climb-in-hold to 3000.

ATIS 128.325	KALAMAZOO APP CON ★ 119.2 340.9	BATTLE CREEK TOWER ★ 126.825 239.025	GND CON 121.7 256.875	UNICOM 122.95	CTAF 126.825 0
------------------------	---	--	---------------------------------	-------------------------	--------------------------



APP CRS **183°**
Rwy Idg **3798**
TDZE **586**
Apt Elev **586**

RNAV (GPS) RWY 18

BAY CITY/ JAMES CLEMENTS MUNI (3CM)



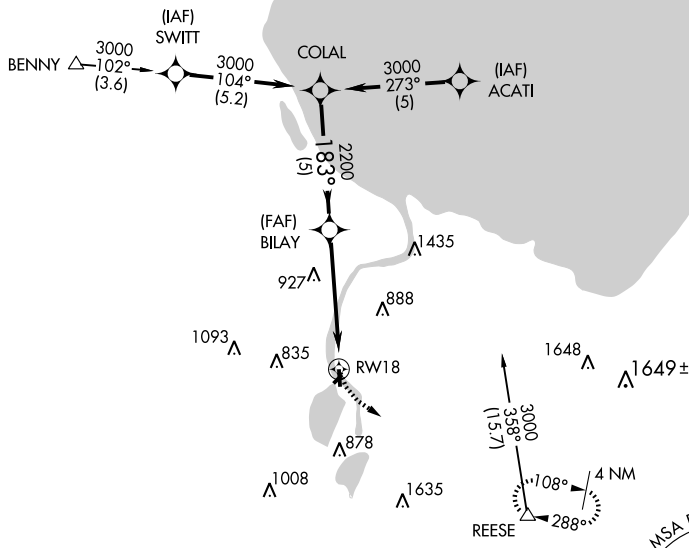
NA

GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.
Use Saginaw altimeter setting.
Straight-in minimums NA at night.
Circling NA southeast of Rwy 23 and 36.

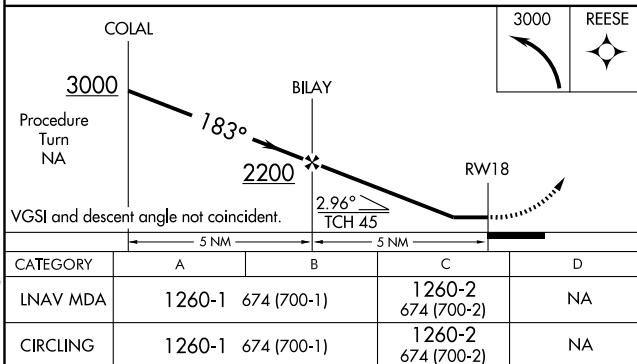
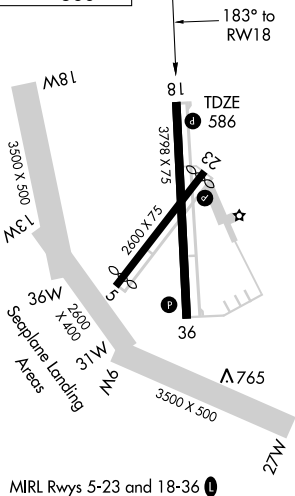
MISSED APPROACH: Climbing left turn to 3000 direct REESE WP and hold.

SAGINAW APP CON ★
120.95 235.625

UNICOM
122.8 (CTAF) 0



ELEV 586



VOR/DME MBS 112.9 Chan 76	APP CRS 087°	Rwy Idg TDZE Apt Elev N/A N/A 586
---	------------------------	---

VOR-A

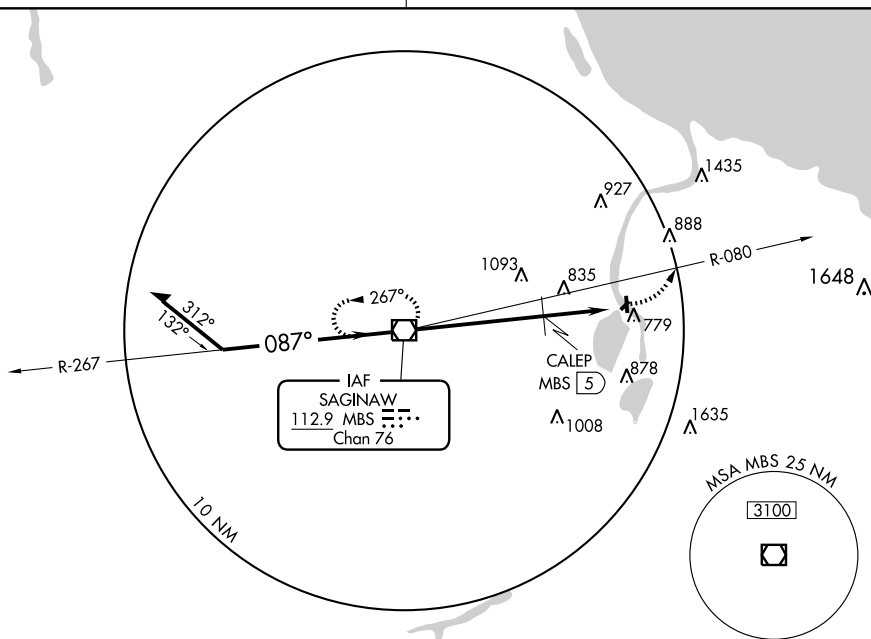
BAY CITY/JAMES CLEMENTS MUNI (3CM)

▼ Use Saginaw altimeter setting.
 ▲ NA Circling not authorized southeast of Rwy 23 and 36.

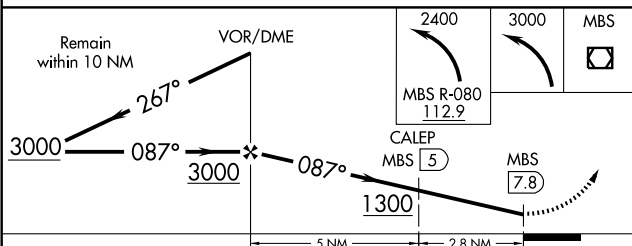
MISSED APPROACH: Climbing left turn to 2400
 via MBS R-080 outbound then climbing left turn
 to 3000 direct MBS VOR/DME and hold.

SAGINAW APP CON ★
120.95 235.625

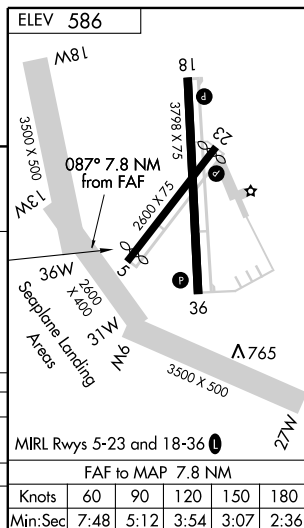
UNICOM
122.8 (CTAF) 0



CAUTION: Tall vessels may be in the approach areas to Rwy 5 and 36.



CATEGORY	A	B	C	D
CIRCLING	1300-1	714 (800-1)	1300-2 714 (800-2)	NA
DME MINIMUMS				
CIRCLING	1120-1 534 (600-1)	1180-1 594 (600-1)	1180-1½ 594 (600-1½)	NA



NDB SJX 382	APP CRS 280°	Rwy Idg TDZE Apt Elev	4300 669 669
-----------------------	------------------------	-----------------------------	---

NDB RWY 27

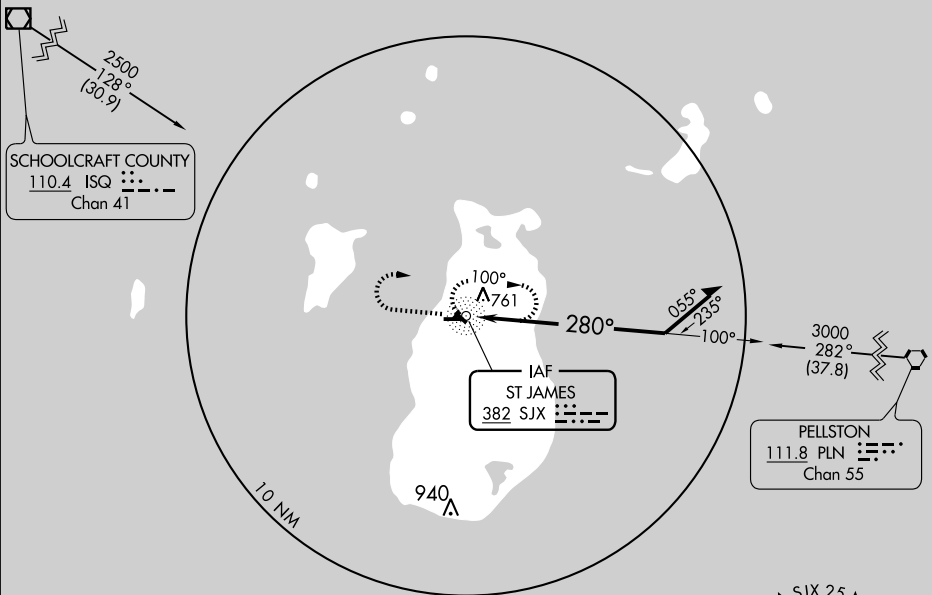
BEAVER ISLAND (SJX)

<p>T NA</p> <p>When local altimeter setting not received, use Pellston altimeter setting and increase all MDA 100 feet.</p>	<p>MISSED APPROACH: Climb to 2400 then right turn direct SJX NDB and hold.</p>
---	--

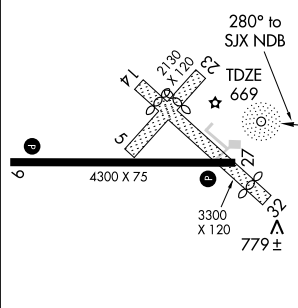
AWOS-3
118.075

MINNEAPOLIS CENTER
134.6 354.05

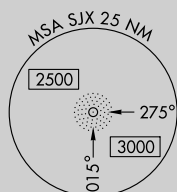
UNICOM
122.8 (CTAF) **0**



ELEV **669**



2400	SJX
↑	○
↘	382



MIRL Rwy 9-27 **0**
REIL Rwy 9 and 27 **0**

CATEGORY	A	B	C	D
S-27	1140-1	471 (500-1)	NA	
CIRCLING	1140-1	471 (500-1)	NA	

BEAVER ISLAND, MICHIGAN
Amdt 1 09295

45°41'N-85°34'W

BEAVER ISLAND (SJX)
NDB RWY 27

EC-1, 26 AUG 2010 to 23 SEP 2010

APP CRS	Rwy Idg	4300
275°	TDZE	669
	Apt Elev	669

RNAV (GPS) RWY 27

BEAVER ISLAND (SJX)

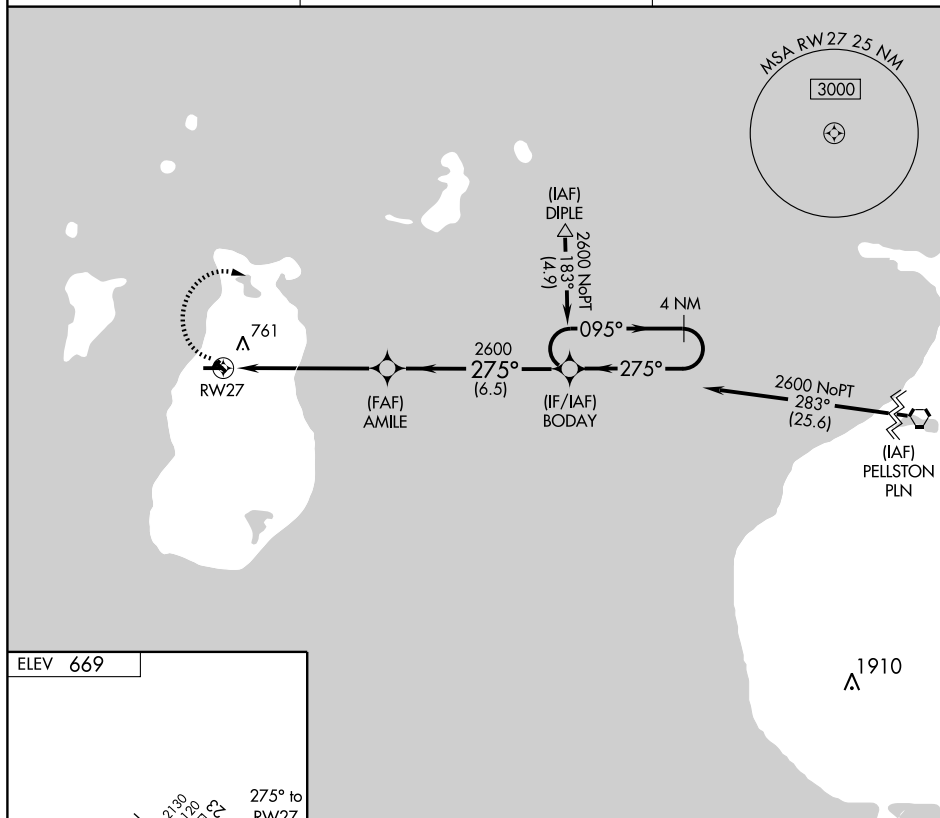
▽
▲ DME/DME RNP -0.3 NA. When local altimeter setting not received, use Pellston altimeter setting and increase all MDA 100 feet. VDP NA when using Pellston altimeter setting.

MISSED APPROACH: Climbing right turn to 2600 direct BODAY and hold.

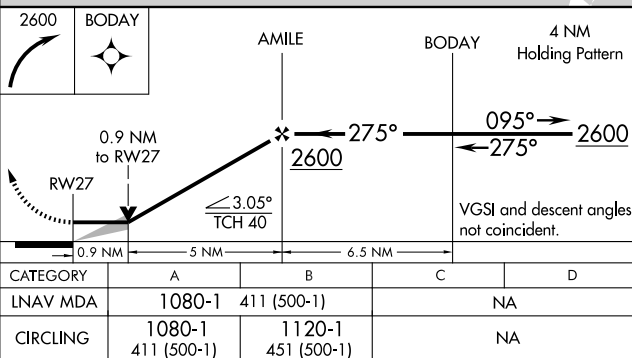
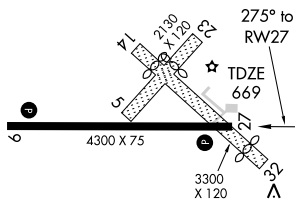
AWOS-3
118.075

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) 0



ELEV **669**



MIRL Rwy 9-27 0
REIL Rwy 9 and 27 0

BELLAIRES

ANTRIM CO (ACB) 1 NE UTC-5(-4DT) N44°59.32' W85°11.90'

623 B **FUEL** 100LL, JET A NOTAM FILE ACB

RWY 02-20: H5000X100 (ASPH) S-38, D-55 MIRL

RWY 02: REIL. PAPI(P2L)—GA 3.0° TCH 42'. Tree.

RWY 20: REIL. PAPI(P2L)—GA 3.25° TCH 45'. Trees.

AIRPORT REMARKS: Attended Jun-Sep 1300-2300Z†, Oct-May 1200-2200Z†. For fuel other times call 231-536-7017. For acft maintenance repairs call 1-800-959-1829. Snow removal equipment on rwy and twy during winter months. Birds on and in/ov arpt. MIRL Rwy 02-20 preset, to increase ints and ACTIVATE REIL Rwy 02-20—CTAF. Ldg fee applies to turbine and jet engine acft; waived with 100 gallon fuel purchase.

WEATHER DATA SOURCES: AWOS-3 119.275 (231) 533-8941.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.9

GCO 121.725 (MINNEAPOLIS CENTER CLNC and FLIGHT SERVICES)

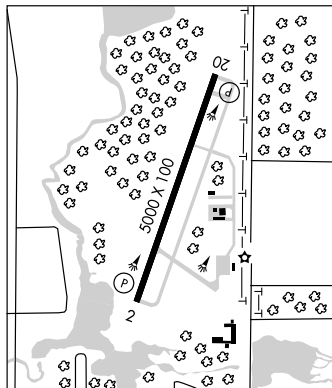
RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07'

W85°33.00' 040° 24.4 NM to fld. 912/2W. **HIWAS.**

CLAM LAKE NDB (MHW) 251 CXK N44°53.96' W85°14.38'

023° 5.6 NM to fld. NOTAM FILE ACB. Unmonitored.



GREEN BAY
H-2K, L-31B
IAP

BELLEVILLE (43G) 3 SW UTC-5(-4DT) N42°10.60' W83°32.75'

696 S4 **FUEL** 100LL NOTAM FILE LAN

RWY 15-33: 2253X80 (TURF)

RWY 15: Fence. Thld dspcd 853'. Rgt tfc.

RWY 33: Thld dspcd 600'. Road.

RWY 18-36: 2157X160 (TURF) (LOCAL USE ONLY)

RWY 18: Trees. Rgt tfc.

RWY 36: Road.

AIRPORT REMARKS: Attended 1300-2200Z†. Rwy 18-36 local use only—displacements not marked. Rwy soft during thawing season. Winter ops verify rwy/snow conditions. Rwy 15-33 thlds and dspcd thlds marked with cones.

COMMUNICATIONS: CTAF 122.9

DETROIT
COPTER

WAAS
CH **56301**
W02A

APP CRS
022°

Rwy ldg
TDZE
Apt Elev
5000
623
623

RNAV (GPS) RWY 2

BELLARE / ANTRIM COUNTY (ACB)

▼ If local altimeter setting not received, use Cherry Capital altimeter setting and increase all DAs/MDAs 60 feet. VDP NA when using Cherry Capital altimeter setting. DME/DME RNP-0.3 NA.

▲

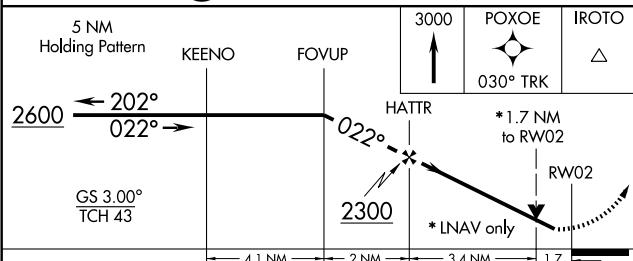
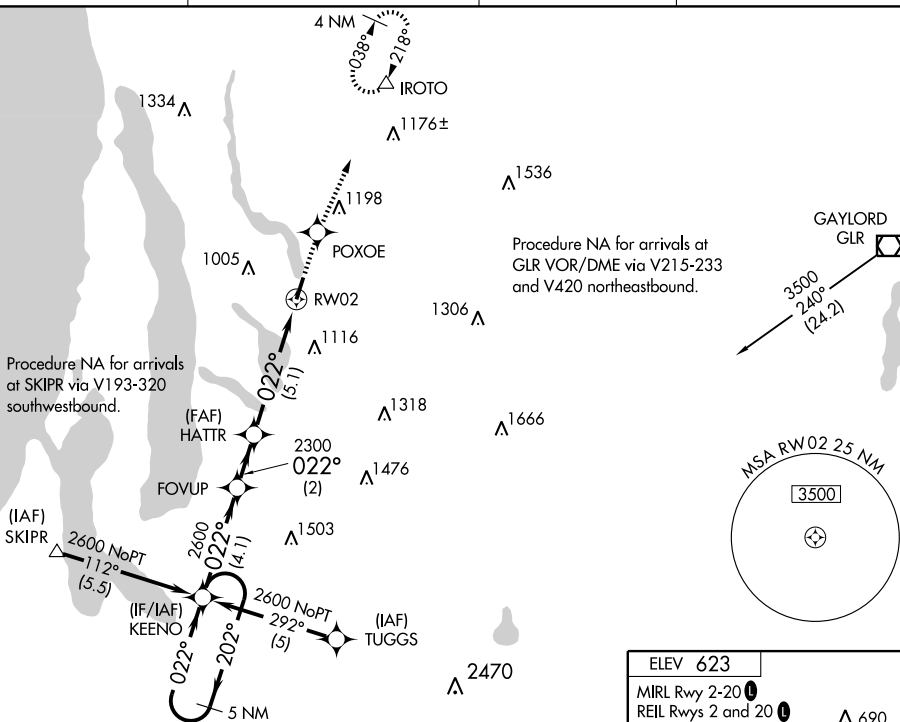
MISSED APPROACH: Climb to 3000 direct POXOE and via 030° track to IROTO and hold.

AWOS-3
119.275

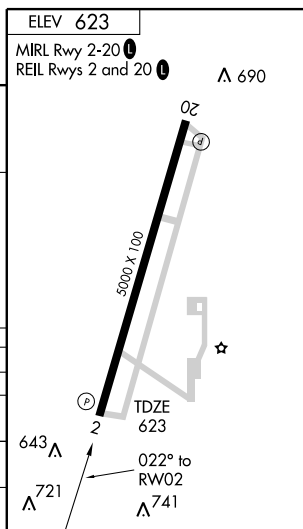
MINNEAPOLIS CENTER
132.9 338.3

GCO
121.725

UNICOM
122.7 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA	908-1 285 (300-1)			
LNNAV/VNAV DA	NA			
LNNAV MDA	1220-1 597 (600-1)	1220-1½ 597 (600-1½)	1220-1¾ 597 (600-1¾)	
CIRCLING	1260-1 637 (700-1)	1340-1 717 (800-1)	1360-2 737 (800-2)	1440-2¾ 817 (900-2¾)



VORTAC TVC 114.6 Chan 93	APP CRS 041°	Rwy Idg TDZE Apt Elev 623	5000 623
--	------------------------	---	---------------------------

VOR RWY 2

BELLAIRE / ANTRIM COUNTY (ACB)



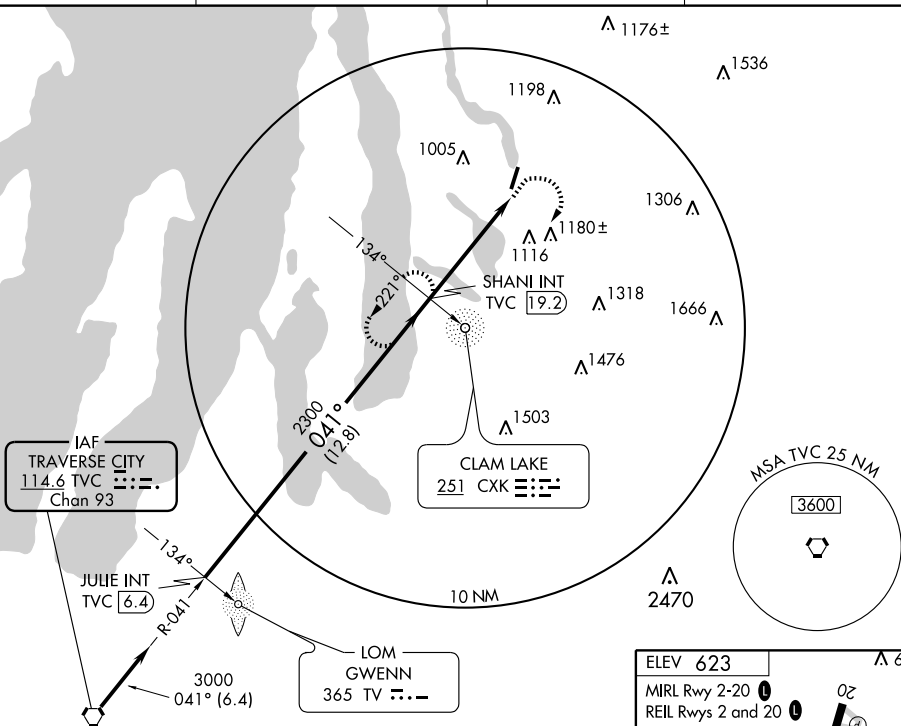
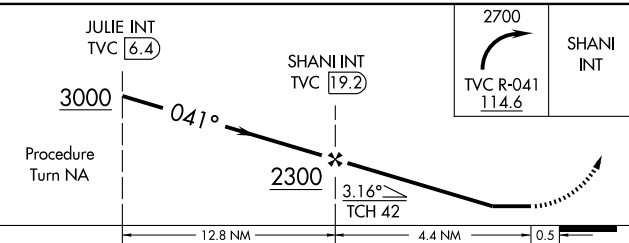
MISSED APPROACH: Climbing right turn to 2700
via TVC R-041 to SHANI Int/19.2 DME and hold.

AWOS-3
119.275

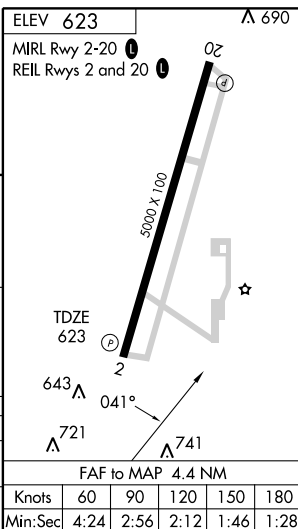
MINNEAPOLIS CENTER
132.9 338.3

GCO
121.725

UNICOM
122.7 (CTAF) 0

**DME or ADF REQUIRED**

CATEGORY	A	B	C	D
S-2	1540-1¼ 917 (1000-1¼)		1540-2¾ 917 (1000-2¾)	1540-3 917 (1000-3)
CIRCLING	1540-1¼ 917 (1000-1¼)		1540-2¾ 917 (1000-2¾)	1540-3 917 (1000-3)



BENTON HARBOR**SOUTHWEST MICHIGAN RGNL** (BEH) 2 NE UTC-5(-4DT) N42°07.72' W86°25.71'**CHICAGO**

643 B S4 FUEL 100LL, JET A1+ OX 3 NOTAM FILE BEH

H-5E, 10F, L-281

RWY 09-27: H5107X100 (ASPH-GRVD) S-60, D-100, 2D-100 HIRL 0.3% up E

IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 44'.

RWY 27: MALSR. Thld dspcd 571'. Trees.

RWY 13-31: H3661X100 (ASPH) S-30, D-45 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.5° TCH 45'.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 41'. Trees.

RWY 18-36: H2498X100 (ASPH) S-16 MIRL

AIRPORT REMARKS: Attended Sat-Sun 1200-2100Z†, May-Oct Mon-Fri 1200-0100Z†, Nov-Apr Mon-Fri 1200-2300Z†. For attendant other times call 269-545-3535, 269-757-1634, Call-in fee. For svc after hrs call 269-325-7529. Call-in fee. Rwy 09 +38' lighted ILS antenna, 152' from rwy end, 300' right. Rwy 13 and Rwy 18 drop off begins 90' from paved sfc, Rwy 09 drop off begins 110' from thld. Birds and deer on and invof arpt. Snow removal ops in progress winter months; vehicle operators will monitor CTAF. Acft arriving/departing Benton Harbor announce intentions on CTAF. Rwy 18-36 pavement cracking. ACTIVATE HIRL Rwy 09-27, MIRL Rws 13-31 and 18-36; MALSR Rwy 27; REIL Rwy 09, Rwy 13 and Rwy 31—CTAF. Ldg fee for all multi-engine acft and commercial single engine acft waived with minimum fuel purchase.

WEATHER DATA SOURCES: ASOS 121.55 (269) 925-9008**COMMUNICATIONS:** CTAF/UNICOM 123.0

KEELER RCO 122.1R 116.6T (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

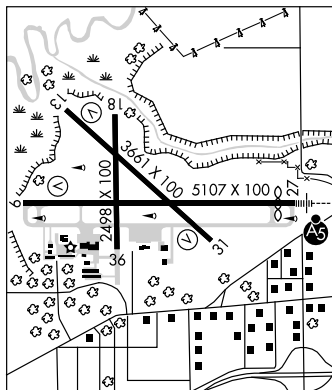
SOUTH BEND CLNC DEL 119.7

AIRSPACE: CLASS E svc 1100-0430Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (I) VOR/DME 116.6 ELX Chan 113 N42°08.66' W86°07.36' 266° 13.7 NM to fld. 795/00E.

MALLY NDB (LOM) 397 BE N42°07.61' W86°18.80' 274° 5.1 NM to fld. Unmonitored.

ILS 108.5 I-BEH Rwy 27. LOM MALLY NDB. Unmonitored. LOC unusable byd 20° left of course and byd 16 NM.

**BERRIEN SPRINGS** N41°57.10' W86°22.06'**CHICAGO**

RCO 121.625 (LANSING RADIO)

L-281

BERRIEN SPRINGS**ANDREWS UNIVERSITY AIRPARK** (C2Ø) 2 W UTC-5(-4DT) N41°57.10' W86°22.06'**CHICAGO**

668 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 13-31: H4161X75 (ASPH) LIRL (NSTD)

IAP

RWY 13: Trees. Rgt tfc.

RWY 31: Thld dspcd 1140'. Trees.

RWY 03-21: 1944X115 (TURF) (LOCAL USE ONLY)

RWY 03: Thld dspcd 613'. Trees.

RWY 21: Thld dspcd 550'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended Sun-Fri 1300-2200Z†. Svcs avbl Sun-Fri only. Fuel 24 hour self svc. Rwy 31 NSTD LIRL due to dspcd thld not lighted. Last 3,021' is lighted. ACTIVATE LIRL Rwy 13-31—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

BERRIEN SPRINGS RCO 121.625 (LANSING RADIO)

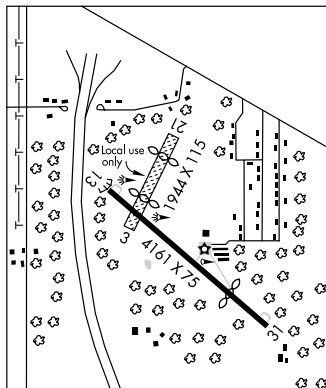
Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 349° 11.2 NM to fld. 804/00E.

HIWAS.



LOC I-BEH	APP CRS	Rwy Idg	4536
<u>108.5</u>	273°	TDZE	637
		Apt Elev	643

ILS RWY 27
BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

T LOC unusable beyond 20° left of course.
A NA Cats A and B S-LOC 27 visibility increased ¼ mile for inoperative MALS R.
 S-ILS 27 inoperative table does not apply.

MALSR

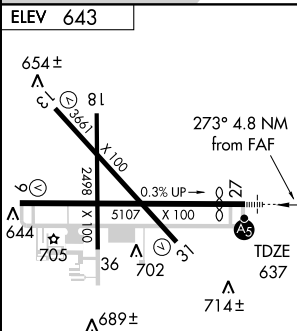
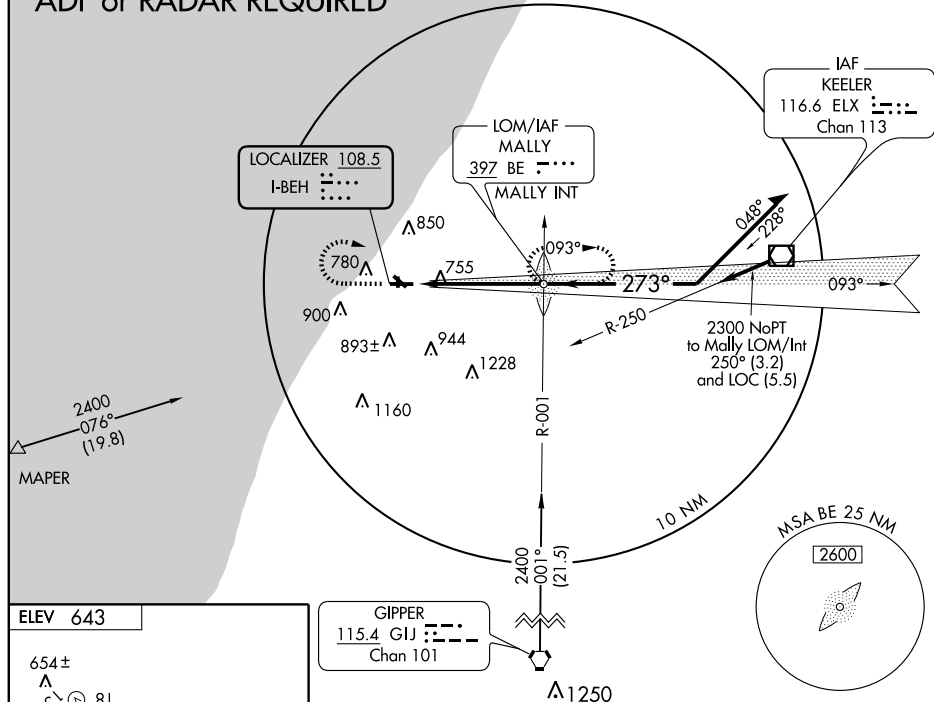
MISSED APPROACH: Climb to 2400, then right turn direct MALLY LOM and hold.

ASOS	SOUTH BEND APP CON★
121.55	118.55 257.8

SOUTH BEND CLNC DEL
119.7

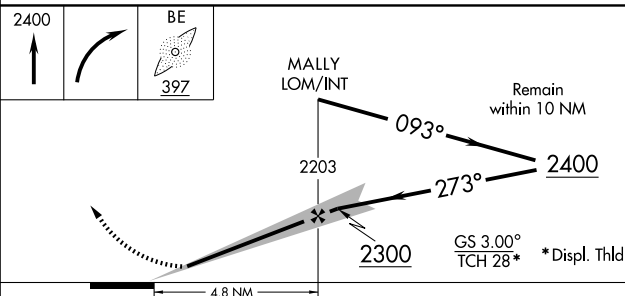
UNICOM
123.0 (CTAF)

ADF or RADAR REQUIRED



REIL Rwy 9, 13 and 31 **L**
MIRL Rwy 13-31 and 18-36 **L**
HIRL Rwy 9-27 **L**

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

BENTON HARBOR, MICHIGAN
Amdt 6E 08325

CATEGORY	A	B	C	D
S-ILS 27	887- $\frac{3}{4}$ 250 (300- $\frac{3}{4}$)			
S-LOC 27	1140- $\frac{3}{4}$ 503 (500- $\frac{3}{4}$)		1140-1 503 (500-1)	
CIRCLING	1140-1	1160-1	1160-1 $\frac{1}{2}$	1200-2
	497 (500-1)	517 (600-1)	517 (600-1 $\frac{1}{2}$)	557 (600-2)

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)
42°08'N - 86°26'W ILS PWY 27

ILS RWY 27

LOC I-BEH 108.5	APP CRS 093°	Rwy Idg TDZE Apt Elev	5107 630 643
---------------------------	------------------------	-----------------------------	---

LOC BC RWY 9

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)



MISSED APPROACH: Climb to 2400 direct ELX VOR/DME and hold.

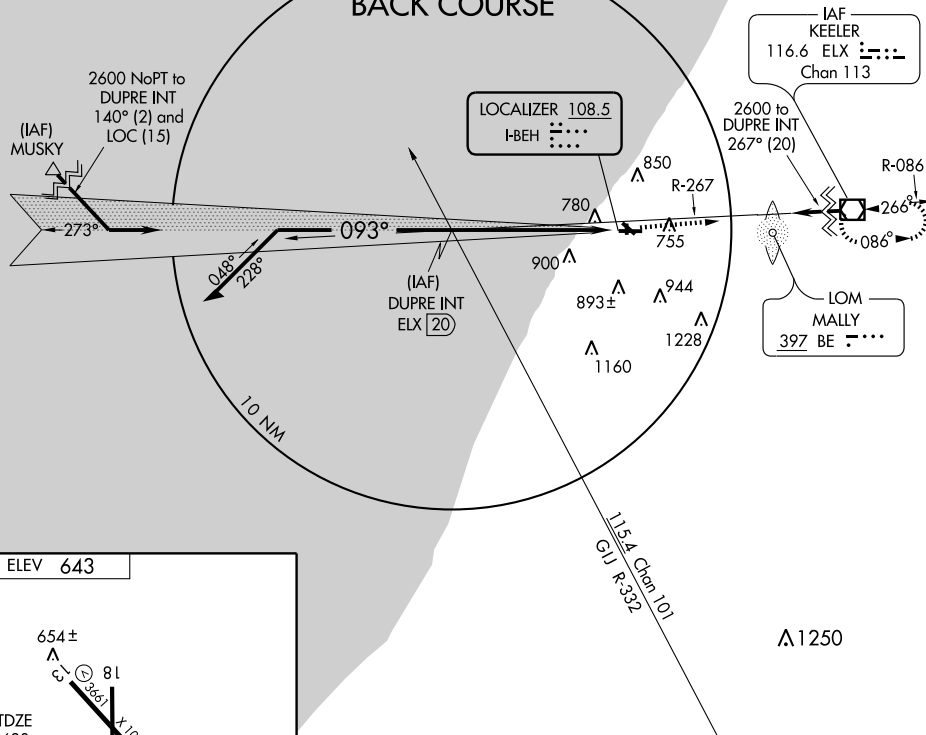
ASOS
121.55

SOUTH BEND APP CON ★
118.55 257.8

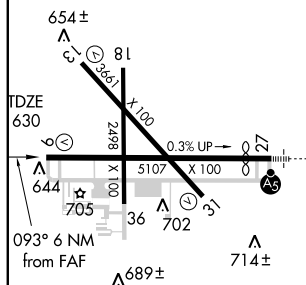
SOUTH BEND CLNC DEL
119.7

UNICOM
123.0 (CTAF) 0

BACK COURSE



ELEV 643



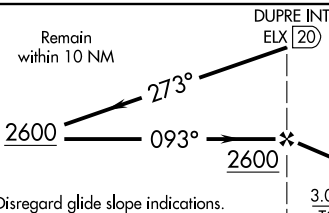
REIL Rws 9, 13 and 31
MIRL Rws 13-31 and 18-36
HIRL Rwy 9-27

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

BENTON HARBOR, MICHIGAN

Amdt 9A 09351



CATEGORY	A	B	C	D
S-9	1040-1	410 (400-1)	1040-1½	410 (400-1½)
CIRCUING	1140-1 497 (500-1)	1160-1 517 (600-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

LOC BC RWY 9

LOM BE	APP CRS	Rwy Idg	4536
<u>397</u>	274°	TDZE	637
		Apt Elev	643

NDB or GPS RWY 27

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)



MALSR



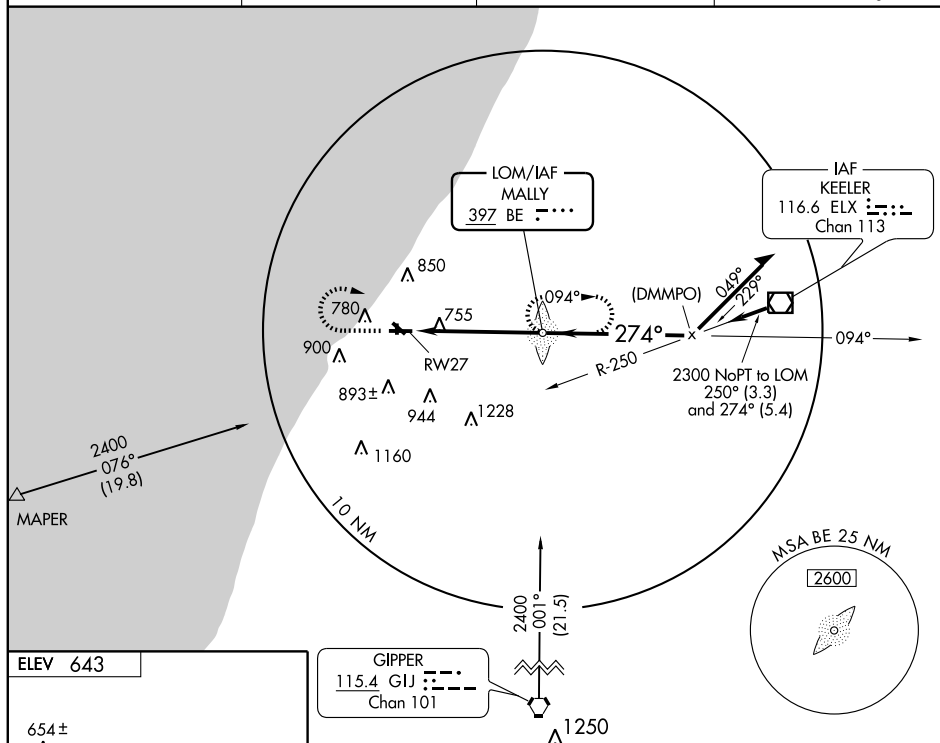
MISSED APPROACH: Climb to 2400 then right turn direct BE LOM and hold.

ASOS
121.55

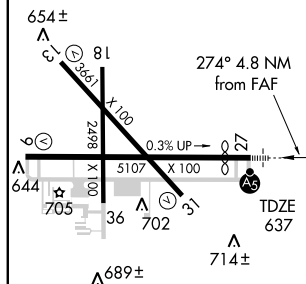
SOUTH BEND APP CON★
118.55 257.8

SOUTH BEND CLNC DEL
119.7

UNICOM
123.0 (CTAF) **L**



ELEV 643

REIL Rwy 9, 13 and 31 **L**

MIRL Rwy 13-31 and 18-36 L

HIRL Rwy 9-27 **L**

FAF to MAP 4.8 NM

Knots	60	90	120	1
-------	----	----	-----	---

Min:Sec	4:48	3:12	2:24	1
---------	------	------	------	---

RENTON HARBOR, MICHIGAN

BENTON HARBOR, MICHIGAN
AUG. 22, 1935

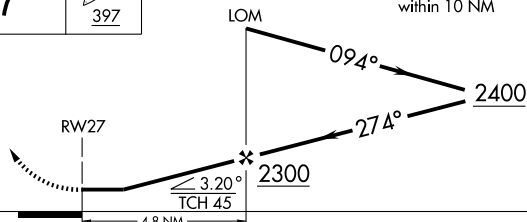
Amdt 9B 08325

GIPPER
4 GIJ ::-·
Chan 101

1250



Remain
within 10 NM



CATEGORY	A	B	C	D
S-27	1200- $\frac{3}{4}$	563 (600- $\frac{3}{4}$)	1200-1 563 (600-1)	1200-1 $\frac{1}{2}$ 563 (600-1 $\frac{1}{2}$)
CIRCLING	1200-1	557 (600-1)	1200-1 $\frac{1}{2}$ 557 (600-1 $\frac{1}{2}$)	1200-2 557 (600-2)

BENTON HARBOR, MICHIGAN

Amdt 9B 08325

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

NDB or GPS RWY 27

WAAS CH 86912 W09A	APP CRS 093°	Rwy Idg 5107 TDZE 630 Apt Elev 643
--	------------------------	---

RNAV (GPS) RWY 9

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

T Baro-VNAV NA when using South Haven altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
A DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use South Haven altimeter setting and increase all DA/MDA 40 feet and LPV all Cats visibility ¼ mile and LNAV Cat D visibility ¼ mile.

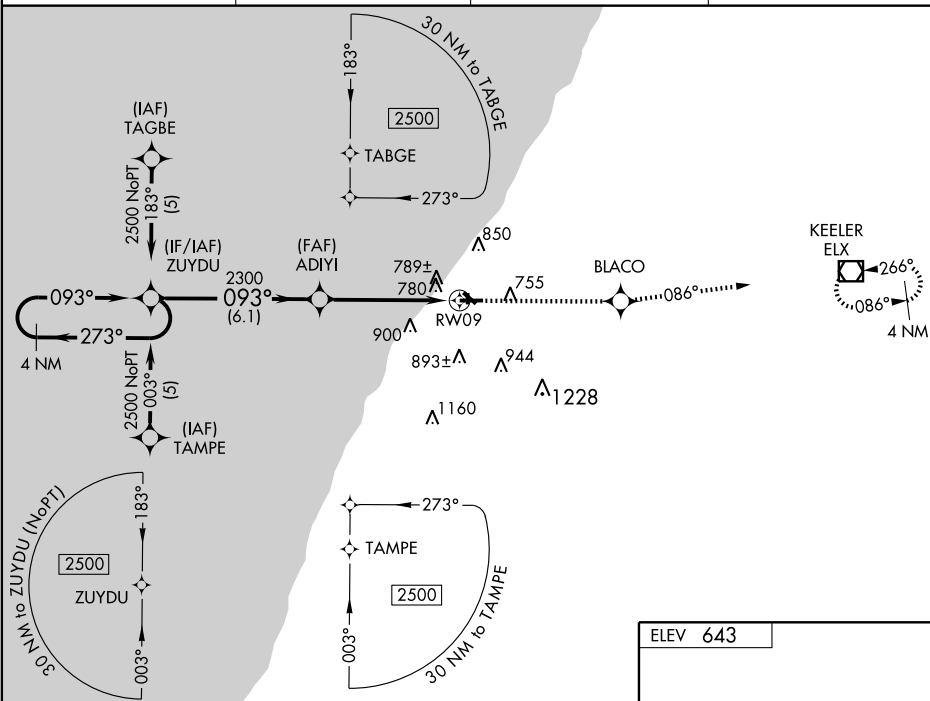
MISSED APPROACH: Climb to 2400
direct BLACO and via 086° track to
ELX VOR/DME and hold.

ASOS
121.55

SOUTH BEND APP CON★
118.55 257.8

SOUTH BEND CLNC DEL
119.7

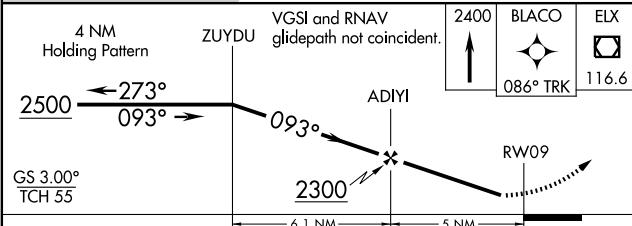
UNICOM
123.0 (CTAF) **L**



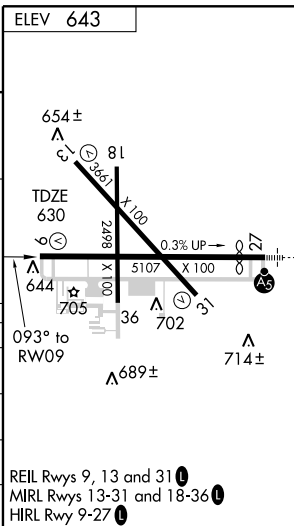
EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

ELEV 643



CATEGORY	A	B	C	D
LPV DA	1019-1¼		389 (400-1¼)	
LNAV/VNAV DA	1101-1¾		471 (500-1¾)	
LNAV MDA	1040-1	410 (500-1)	1040-1¼	410 (500-1¼)
CIRCLING	1120-1	477 (500-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)



BENTON HARBOR, MICHIGAN
Orig 09127

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)
42°08'N - 86°26'W **PNAY (GPS) PWY 0**

RNAV (GPS) RWY 9

VOR/DME ELX
116.6
Chan **113**

APP CRS
266°

Rwy Idg
TDZE **637**
Apt Elev **643**

VOR RWY 27

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)



Cats A and B S-27 visibility increased ¼ mile for inoperative MALS.

MALS



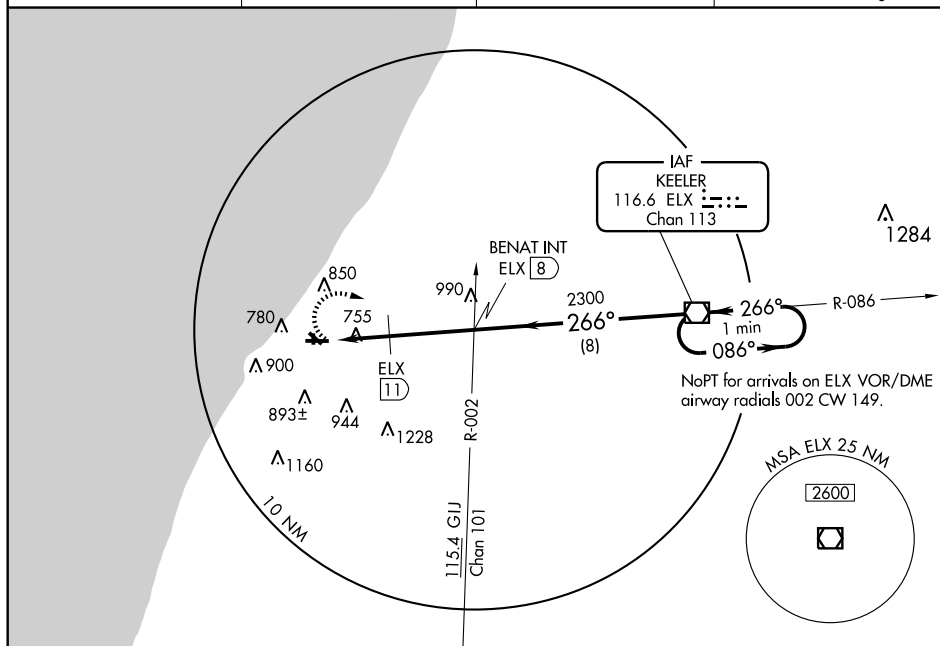
MISSED APPROACH: Climbing right turn to 2400 direct ELX VOR/DME and hold.

ASOS
121.55

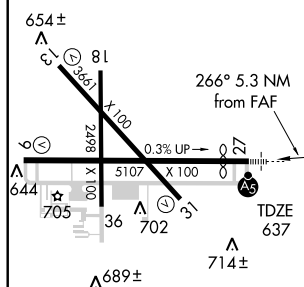
SOUTH BEND APP CON ★
118.55 257.8

SOUTH BEND CLNC DEL
119.7

UNICOM
123.0 (CTAF) 1



ELEV 643



REIL Rwy 9, 13 and 31
MIRL Rwy 13-31 and 18-36
HIRL Rwy 9-27

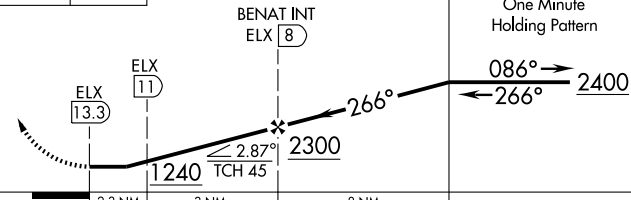
FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

BENTON HARBOR, MICHIGAN

Amdt 18B 08325

2400 ELX
116.6



VOR/DME				
One Minute Holding Pattern				
CATEGORY	A	B	C	D
S-27	1240-¾ 603 (600-¾)		1240-1¼ 603 (600-1¼)	1240-1½ 603 (600-1½)
CIRCLING	1240-1 597 (600-1)		1240-1¾ 597 (600-1¾)	1240-2 597 (600-2)
DME MINIMUMS				
S-27	1120-¾ 483 (500-¾)			1120-1 483 (500-1)
CIRCLING	1140-1 497 (500-1)	1160-1 517 (600-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

VOR RWY 27

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

BENTON HARBOR**SOUTHWEST MICHIGAN RGNL** (BEH) 2 NE UTC-5(-4DT) N42°07.72' W86°25.71'**CHICAGO**

643 B S4 FUEL 100LL, JET A1+ OX 3 NOTAM FILE BEH

H-5E, 10F, L-281

RWY 09-27: H5107X100 (ASPH-GRVD) S-60, D-100, 2D-100 HIRL 0.3% up E

IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 44'.

RWY 27: MALSR. Thld dspcd 571'. Trees.

RWY 13-31: H3661X100 (ASPH) S-30, D-45 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.5° TCH 45'.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 41'. Trees.

RWY 18-36: H2498X100 (ASPH) S-16 MIRL

AIRPORT REMARKS: Attended Sat-Sun 1200-2100Z†, May-Oct Mon-Fri 1200-0100Z†, Nov-Apr Mon-Fri 1200-2300Z†. For attendant other times call 269-545-3535, 269-757-1634, Call-in fee. For svc after hrs call 269-325-7529. Call-in fee. Rwy 09 +38' lighted ILS antenna, 152' from rwy end, 300' right. Rwy 13 and Rwy 18 drop off begins 90' from paved sfc, Rwy 09 drop off begins 110' from thld. Birds and deer on and invof arpt. Snow removal ops in progress winter months; vehicle operators will monitor CTAF. Acft arriving/departing Benton Harbor announce intentions on CTAF. Rwy 18-36 pavement cracking. ACTIVATE HIRL Rwy 09-27, MIRL Rws 13-31 and 18-36; MALSR Rwy 27; REIL Rwy 09, Rwy 13 and Rwy 31—CTAF. Ldg fee for all multi-engine acft and commercial single engine acft waived with minimum fuel purchase.

WEATHER DATA SOURCES: ASOS 121.55 (269) 925-9008**COMMUNICATIONS:** CTAF/UNICOM 123.0

KEELER RCO 122.1R 116.6T (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctcⓇ **CHICAGO CENTER APP/DEP CON** 127.55

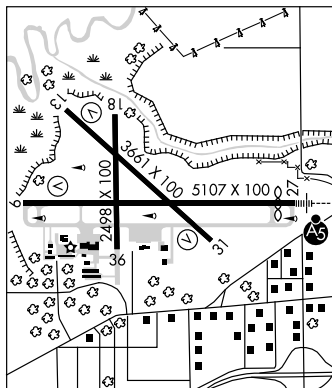
SOUTH BEND CLNC DEL 119.7

AIRSPACE: CLASS E svc 1100-0430Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (I) VOR/DME 116.6 ELX Chan 113 N42°08.66' W86°07.36' 266° 13.7 NM to fld. 795/00E.

MALLY NDB (LOM) 397 BE N42°07.61' W86°18.80' 274° 5.1 NM to fld. Unmonitored.

ILS 108.5 I-BEH Rwy 27. LOM MALLY NDB. Unmonitored. LOC unusable byd 20° left of course and byd 16 NM.

**BERRIEN SPRINGS** N41°57.10' W86°22.06'**CHICAGO**

RCO 121.625 (LANSING RADIO)

L-281

BERRIEN SPRINGS**ANDREWS UNIVERSITY AIRPARK** (C2Ø) 2 W UTC-5(-4DT) N41°57.10' W86°22.06'**CHICAGO**

668 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 13-31: H4161X75 (ASPH) LIRL (NSTD)

IAP

RWY 13: Trees. Rgt tfc.

RWY 31: Thld dspcd 1140'. Trees.

RWY 03-21: 1944X115 (TURF) (LOCAL USE ONLY)

RWY 03: Thld dspcd 613'. Trees.

RWY 21: Thld dspcd 550'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended Sun-Fri 1300-2200Z†. Svcs avbl Sun-Fri only. Fuel 24 hour self svc. Rwy 31 NSTD LIRL due to dspcd thld not lighted. Last 3,021' is lighted. ACTIVATE LIRL Rwy 13-31—CTAF.

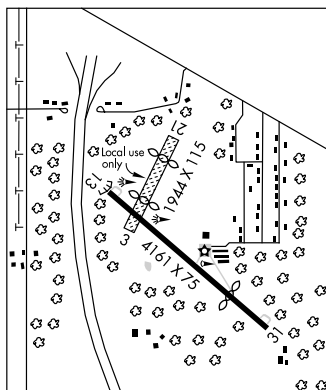
COMMUNICATIONS: CTAF/UNICOM 122.7

BERRIEN SPRINGS RCO 121.625 (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctcⓇ **CHICAGO CENTER APP/DEP CON** 127.55**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 349° 11.2 NM to fld. 804/00E.

HIWAS.



VOR/DME ELX 116.6 Chan 113	APP CRS 224°	Rwy Idg TDZE Apt Elev N/A N/A 668
--	------------------------	---

VOR-A

BERRIEN SPRINGS / ANDREWS UNIVERSITY AIRPARK (C20)



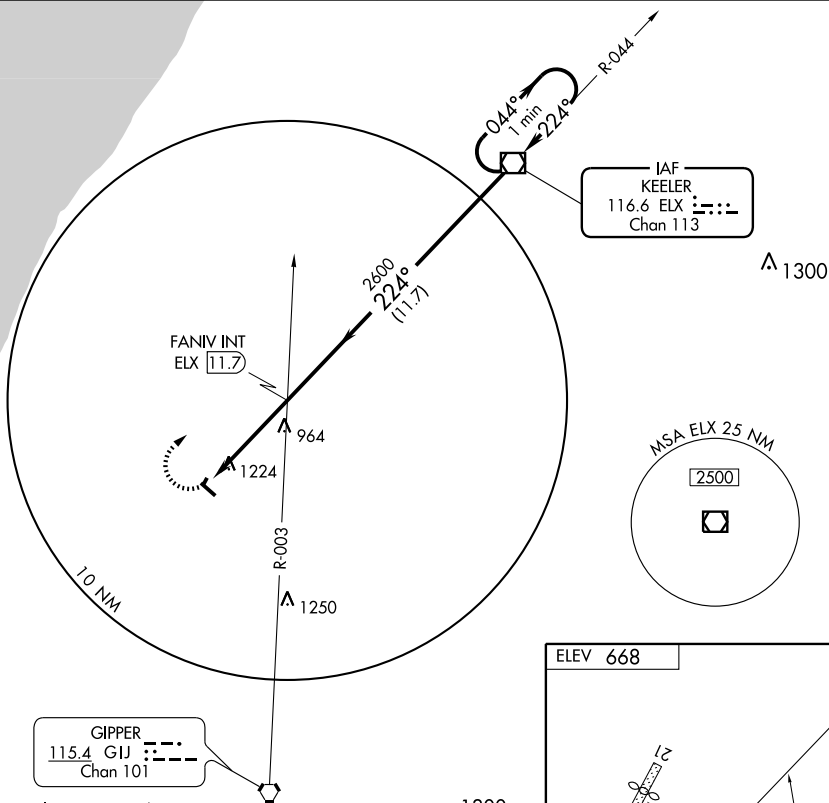
NA

Use Benton Harbor altimeter setting.
Procedure NA at night.

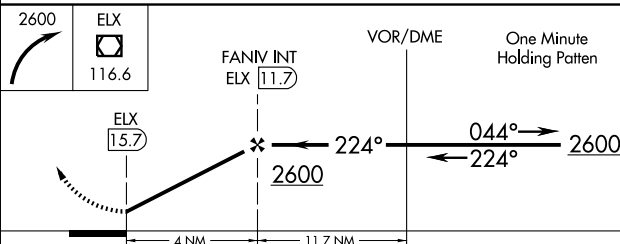
MISSED APPROACH: Climbing right turn
to 2600 direct ELX VOR/DME and hold.

SOUTH BEND APP CON ★
118.55 257.8

UNICOM
122.7 (CTAF) **0**

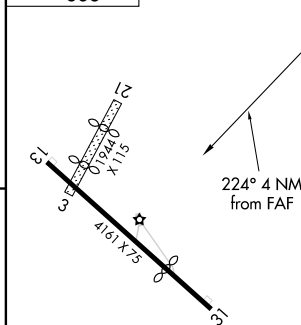


NoPT for Arrivals on ELX VOR/DME
Airway Radials 002 clockwise 094.



CATEGORY	A	B	C	D
CIRCLING	1620-1¼ 952 (1000-1¼)	1620-1½ 952 (1000-1½)	NA	NA

ELEV 668

LIRL Rwy 13-31 **0**

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

BIG RAPIDS

ROBEN-HOOD (RQB) 2 NW UTC-5(-4DT) N43°43.36' W85°30.24'

CHICAGO

990 B S4 FUEL 100LL NOTAM FILE RQB

L-281

RWY 09-27: H4300X75 (ASPH) S-20 MIRL 1.0% up W

IAP

RWY 09: REIL PAPI(P2L)—GA 3.33° TCH 25'. Trees.

RWY 27: REIL. PAPI(P4L). Tree.

RWY 14-32: H2700X75 (ASPH) S-20 MIRL 0.3% up NW

RWY 14: Trees. RWY 32: Tree.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z. 24 hr self serve fuel. Call in fee charged. Deer on and invof arpt. Rwy 14-32 extensive cracking. Ultralight activity on and invof arpt. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27 and Rwy 14-32; PAPI Rwy 09 and Rwy 27; REIL Rwy 09 and Rwy 27—CTAF.

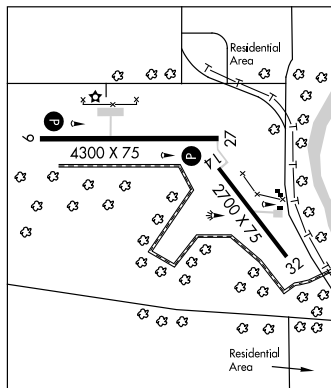
WEATHER DATA SOURCES: AWOS-3 121.125 (231) 796-0884.**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑧ MINNEAPOLIS CENTER APP/DEP CON 120.85

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 047° 12.8 NM to fld. 920/1W.



BISHOP INTL (See FLINT)

BLISSFIELD

BETZ (44G) 2 N UTC-5(-4DT) N41°51.34' W83°52.25'

DETROIT

691 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 09-27: 2602X92 (TURF)

RWY 09: Thld dspcd 415'. Road.

RWY 27: Thld dspcd 390'. Road.

AIRPORT REMARKS: Unattended. Fuel avbl by prior arrangement; phone 517-499-4860. Rwy 09-3' ditch 10' from thld. To confirm snow conditions winter months call 517-499-4860. Rwy 09-27 NSTD LIRL on arpt not for public use; marked with white lgts. Rwy 09-27 thlds and dspcd thlds marked with cones.

COMMUNICATIONS: CTAF 122.9

BOIS BLANC ISLAND (6Y1) 3 NW UTC-5(-4DT) N45°45.98' W84°30.23'

LAKE HURON

664 B NOTAM FILE LAN

L-31C

RWY 10-28: H3498X75 (ASPH) MIRL

RWY 10: Thld dspcd 90'. Road.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.

AIRPORT REMARKS: Unattended. 231-634-7123 manager residence, 231-634-7052 unattended arpt manager office phone at arpt, 231-634-7061 unattended arpt phone. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 046° 10.6 NM to fld.

840/6W. HIWAS.

BOYNE CITY MUNI (N98) 1 SE UTC-5(-4DT) N45°12.50' W84°59.42'

GREEN BAY

657 FUEL 100LL NOTAM FILE LAN

L-31B

RWY 09-27: H4000X75 (ASPH) MIRL

RWY 09: PAPI(P2L)—GA 4.0° TCH 28'. Thld dspcd 600'. Road.

RWY 27: REIL. Trees.

AIRPORT REMARKS: Unattended. Self svc fuel. Deer and birds on and invof rwys. +4' fence parallel to rwy, 84' south of rwy centerline, +6' fence 122' north of rwy centerline. ACTIVATE MIRL Rwy 09-27, PAPI Rwy 09, REIL Rwy 27—122.9.

COMMUNICATIONS: CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 215° 28.9 NM to fld. 840/6W. HIWAS.

APP CRS **275°**
 Rwy Idg **4300**
 TDZE **977**
 Apt Elev **990**

GPS RWY 27

BIG RAPIDS / ROBEN-HOOD (RQB)



NA

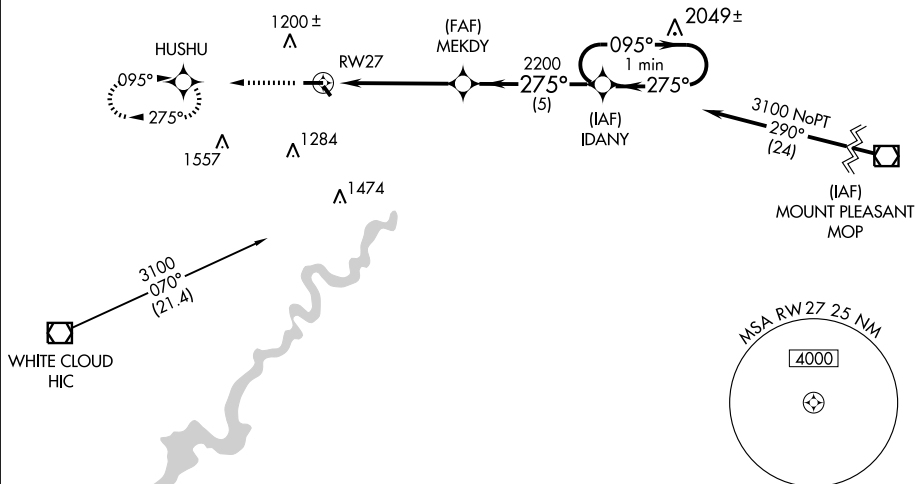
Obtain local altimeter setting on CTAF; when not received, use Muskegon altimeter setting.

MISSED APPROACH: Climb to 2900
 direct HUSHU WP and hold.

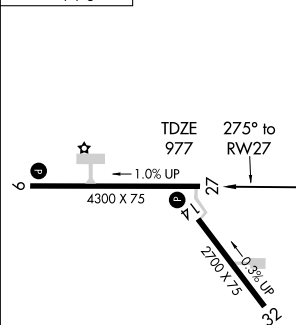
AWOS-3
121.125

MINNEAPOLIS CENTER
120.85 322.35

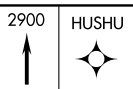
UNICOM
122.8 (CTAF) 0



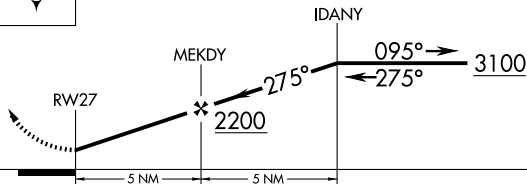
ELEV 990



REIL Rwy 9 and 27
 MRL Rwy 9-27 and 14-32



One Minute
 Holding Pattern



CATEGORY	A	B	C	D
S-27	1460-1	483 (500-1)	1460-1¼ 483 (500-1¼)	1460-1½ 483 (500-1½)
CIRCLING	1500-1	510 (600-1)	1540-1½ 550 (600-1½)	1600-2 610 (700-2)
MUSKEGON ALTIMETER SETTING MINIMUMS				
S-27	1620-1	643 (700-1)	1620-1¾ 643 (700-1¾)	1620-2 643 (700-2)
CIRCLING	1660-1	670 (700-1)	1700-2 710 (800-2)	1760-2½ 770 (800-2½)

BIG RAPIDS, MICHIGAN

Orig-B 03JUN10

BIG RAPIDS / ROBEN-HOOD (RQB)

43°43'N - 85°30'W

GPS RWY 27

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME HIC
117.6
Chan **123**

APP CRS
047°

Rwy Idg
TDZE
Apt Elev
N/A
N/A
990

VOR/DME or GPS-A
BIG RAPIDS / ROBEN-HOOD (RQB)

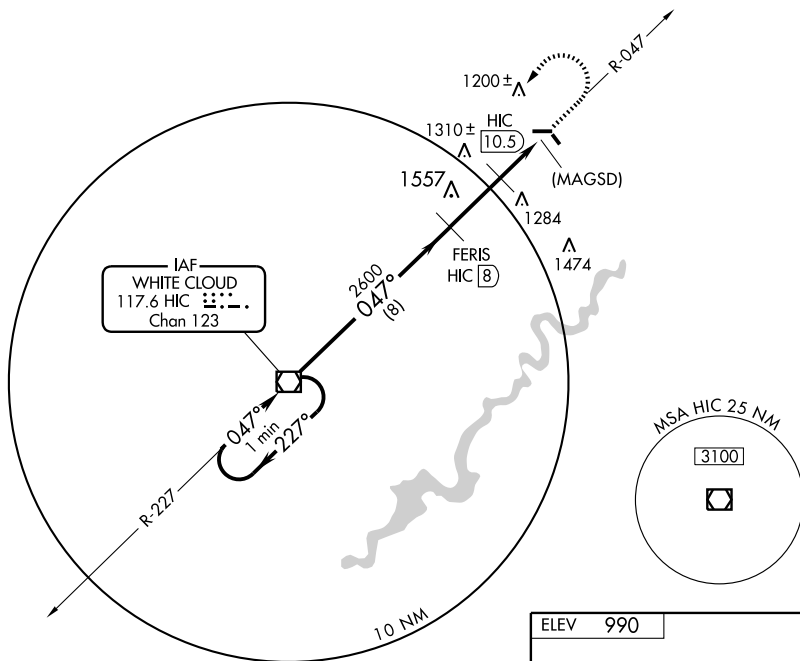
▼ Obtain local altimeter setting on CTAF; when
▲ NA not received, use Muskegon altimeter setting.

MISSED APPROACH: Climb to 2800, then
left turn direct HIC VOR/DME and hold.

AWOS-3
121.125

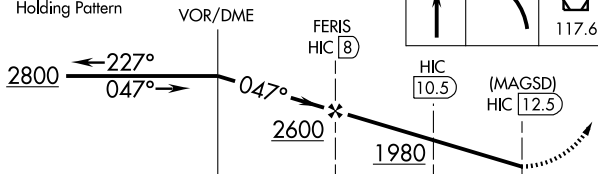
MINNEAPOLIS CENTER
120.85 322.35

UNICOM
122.8 (CTAF) **0**



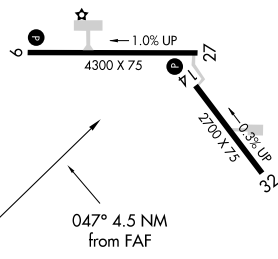
NoPT for arrivals on HIC VOR/DME
airway radials 140 CW 303.

One Minute
Holding Pattern



CATEGORY	A	B	C	D
CIRCLING	1540-1	550 (600-1)	1540-1½ 550 (600-1½)	1600-2 610 (700-2)
MUSKEGON ALTIMETER SETTING MINIMUMS				
CIRCLING	1700-1	710 (800-1)	1700-2 710 (800-2)	1760-2½ 770 (800-2½)

ELEV **990**



REIL Rwy 9 and 27 **0**
MIRL Rwy 9-27 and 14-32 **0**

BOYNE FALLS**BOYNE MOUNTAIN** (BFA) 1 W UTC-5(-4DT) N45°09.95' W84°55.45'

719 FUEL 100LL, JET A + NOTAM FILE LAN

RWY 17-35: H5187X60 (ASPH) LIRL(NSTD) 0.3% up S

RWY 17: REIL. Thld dspcd 300'. Road.

RWY 35: REIL. Thld dspcd 500'. Trees.

AIRPORT REMARKS: Unattended. For fuel call 231-549-6000. Deer and birds on and invof arpt. Rwy 17-35 extensive cracking. Rwy 17-35 NSTD LIRL, 80' from rwy edges. Rwy has reflectors summer months. ACTIVATE NSTD LIRL Rwy 17-35 and REIL Rws 17 and 35-122.85. Rwy 17-35 has 10' paved shoulder each side; last 4700' Rwy 35.

COMMUNICATIONS: CTAF/UNICOM 122.8

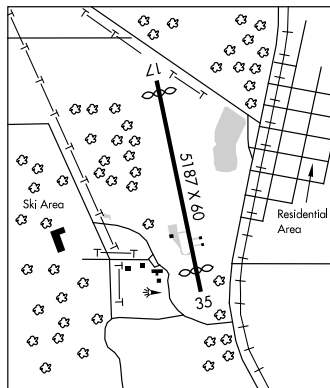
⑧ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55

N45°37.84' W84°39.85' 208° 30 NM to fld.

840/6W. HIWAS.



LAKE HURON

H-2K, L-31B

IAP

BOYNE MOUNTAIN (See BOYNE FALLS)**BRANCH CO MEML** (See COLDWATER)**BRIGHTON** (45G) 3 N UTC-5(-4DT) N42°34.19' W83°46.71'

973 B NOTAM FILE LAN

RWY 04-22: H3120X24 (ASPH) MIRL (NSTD)

RWY 04: Thld dspcd 195'. Trees.

RWY 22: PAPI(P4L)—GA 3.6° TCH 29'. Thld dspcd 365'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 04-22 NSTD MIRL located 50' from rwy edge, NSTD configuration for thlds. Rwy 22 NSTD PAPI, NSTD installation—may only be visible on short final apch. For local use only. ACTIVATE rotating bcn, MIRL Rwy 04-22 and PAPI Rwy 22—CTAF.

COMMUNICATIONS: CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53' W83°35.65' 323° 12.7 NM to fld. 950/3W.

DETROIT

COPTER

L-28J, A

BROOKLYN**SHAMROCK FLD** (6G8) 1 SE UTC-5(-4DT) N42°05.70' W84°14.45'

995 NOTAM FILE LAN

RWY 01-19: 2822X100 (TURF) LIRL

RWY 01: Tree. Rgt tfc.

RWY 19: Thld dspcd 613'. P-line.

AIRPORT REMARKS: Attended May-Nov irregularly. Dec-Apr arpt CLOSED. CAUTION: Deer on and invof arpt. 105' unlighted p-line and tower ¼ mile from thld extended left and right of centerline Rwy 19. ACTIVATE LIRL Rwy 01-19—CTAF. All tfc patterns conducted E of Rwy 01-19. Rwy 01-19 marked with 3' yellow cones; dspcd thld marked with 3 cones each side.

COMMUNICATIONS: CTAF 122.9

DETROIT

COPTER

BROOKS FLD (See MARSHALL)**BUNCH'S HALF ACRE** (See HARRIETTA)**CAKLEBERRY** (See DEXTER)**CADILLAC** N44°16.50' W85°24.86' NOTAM FILE CAD.

NDB (MHW) 269 CAD at Wexford Co.

GREEN BAY

L-31B

APP CRS **175°**
 Rwy Idg **4887**
 TDZE **707**
 Apt Elev **719**

RNAV (GPS) RWY 17

BOYNE FALLS/ BOYNE MOUNTAIN (BFA)

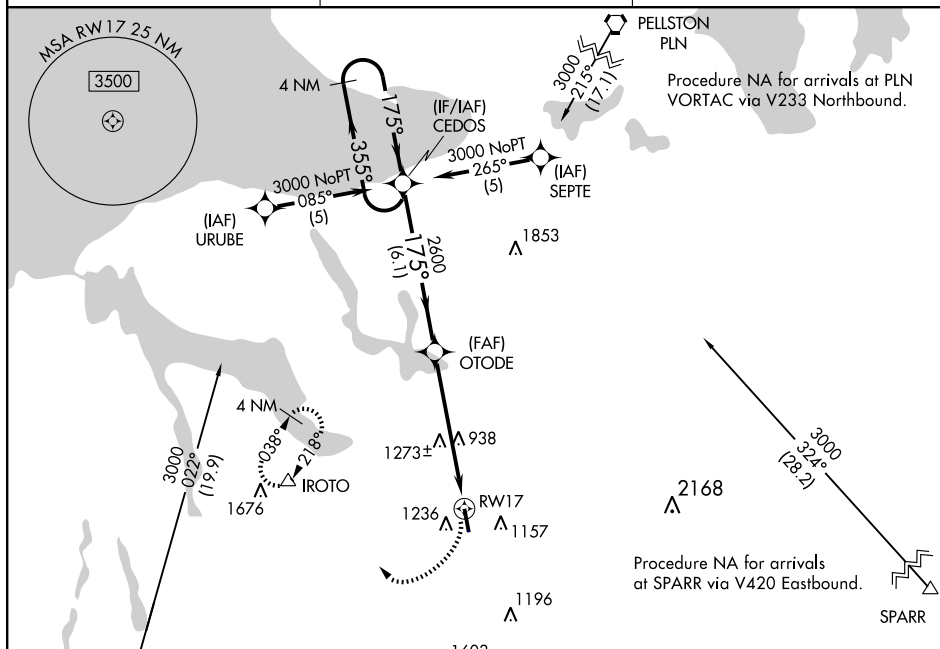
NA Circling NA west of Rwy 17-35. DME/DME RNP-0.3 NA. Use Bellaire altimeter setting; when not received, use Pellston altimeter setting and increase all MDAs 20 feet and increase LNAV CATs A, C, and D visibility ¼ mile, and Circling CATs A and C ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct IROTO and hold.

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF)

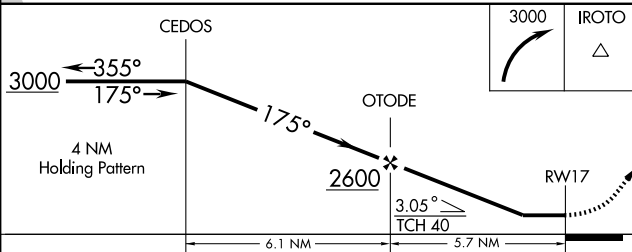
122.85 0



ELEV 719

175° to
 RW17

TDZE
 707



CATEGORY	A	B	C	D
LNAV MDA	1580 - 1 873 (900-1)	1580 - 1¼ 873 (900-1¼)	1580 - 2½ 873 (900-2½)	1580 - 2¾ 873 (900-2¾)
CIRCLING	1580 - 1 861 (900-1)	1580 - 1¼ 861 (900-1¼)	1580 - 2½ 861 (900-2½)	1640 - 3 921 (1000-3)

REIL Rwy 17 and 35 0
 URL Rwy 17-35 0

APP CRS **355°**
 Rwy Idg **4687**
 TDZE **719**
 Apt Elev **719**

RNAV (GPS) RWY 35

BOYNE FALLS/ BOYNE MOUNTAIN (BFA)

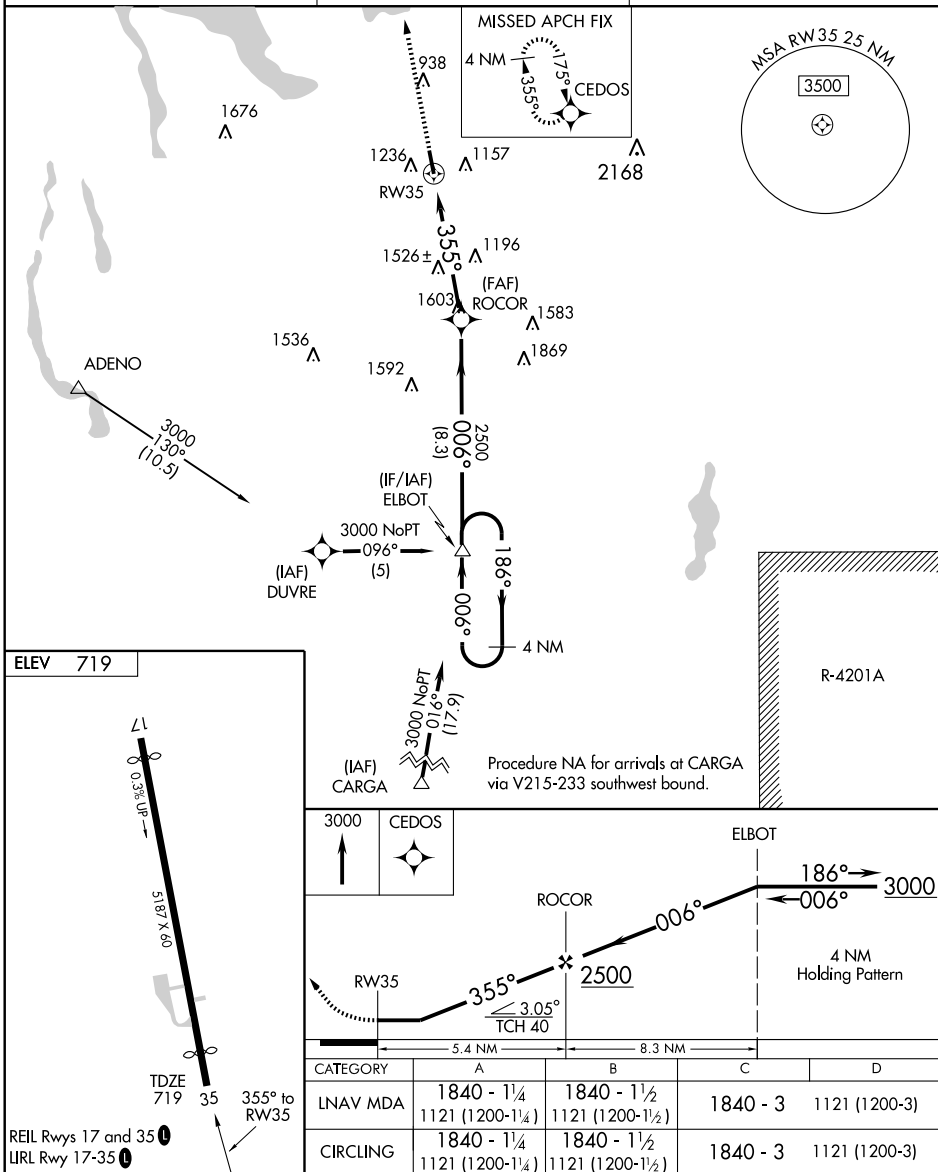
▽ Circling NA west of Rwy 17-35. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Bellaire altimeter setting; when not received, use Pellston altimeter setting.

MISSED APPROACH: Climb to 3000 direct CEDOS and hold.

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF)

122.85 0



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

CADILLAC

WEXFORD CO (CAD) 2 N UTC-5(-4DT) N44°16.52' W85°25.14'

1307 B S4 FUEL 100LL, JET A NOTAM FILE CAD

RWY 07-25: H5000X100 (ASPH-PFC) S-30, D-45 MIRL

RWY 07: REIL. MALS. VASI(V2L)—GA 3.0° TCH 41'.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Railroad.

RWY 18-36: 2006X150 (TURF)

RWY 18: Trees.

RWY 36: Stack.

AIRPORT REMARKS: Attended Mon-Fri 1200-2200Z±, Jun-Aug Sat-Sun

1200-2200Z±, Sep-May Sat-Sun 1200-1800Z±. After hrs

attendance avbl on req 231-779-9211. Unattended New Years,

Easter, Thanksgiving, Christmas. Fuel 24 hr self svc. Rwy 18-36

CLOSED Dec thru Mar and when snow covered except for ski

equipped acft. Deer on and invof arpt. Glider activity on and invof

arpt Apr-Nov. Ultralight activity on and invof arpt Apr-Nov.

ACTIVATE MIRL Rwy 07-25; MALS Rwy 07; REIL Rwy 07 and Rwy

25; VASI Rwy 07 and PAPI Rwy 25—CTAF. Ldg fee. Ldg fee for

commercial ops waived with minimum fuel purchase. Rwy 18-36

marked with 18 inch yellow cones.

WEATHER DATA SOURCES: AWOS-3 128.325 (231) 779-9536.

COMMUNICATIONS: CTAF/UNICOM 122.8

R MINNEAPOLIS CENTER APP/DEP CON 132.9

GCO 121.725 (MINNEAPOLIS CENTER CLNC and LANSING FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

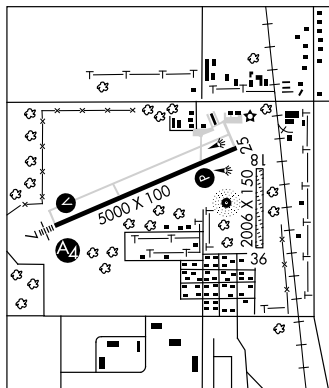
TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 169° 24.2 NM to fld. 912/2W.

HIWAS

CADILLAC NDB (MHW) 269 CAD N44°16.50' W85°24.86' at fld. NOTAM FILE CAD.

WEXOR NDB (LOM) 336 MA N44°14.22' W85°32.84' 071° 6 NM to fld.

ILS/DME 108.55 I-MAY Chan 22(Y) Rwy 07. LOM WEXOR NDB.



CAGNEY (See CLIO)

CAIN FLD (See STANWOOD)

CALKINS FLD (see WAYLAND)

CALVIN CAMPBELL MUNI (See INDIAN RIVER)

CANTON-PLYMOUTH-METTETAL (See PLYMOUTH)

CAPITAL REGION INTL (See LANSING)

CARGL N42°21.38' W82°57.26'. NOTAM FILE DET.

NDB (MHW/LOM) 230 VQ 327° 4 NM to Coleman A. Young Muni.

DETROIT

A

CARLETON N42°02.88' W83°27.45' NOTAM FILE LAN.

(H) VORTAC 115.7 CRL Chan 104 028° 10.9 NM to Detroit Metropolitan Wayne Co. 629/3W.

DETROIT

HIWAS.

VOR portion unusable 360°-040° blo 5000'. DME unusable byd 35 NM blo 2500'.

RCO 122.1R 115.7T (LANSING RADIO)

CARLETON

WICKENHEISER (W87) 3 S UTC-5(-4DT) N42°01.09' W83°22.63'

610 S2 FUEL 100LL NOTAM FILE LAN

RWY 18-36: 2575X60 (TURF)

RWY 18: Thld dsplcd 1000'. P-line.

RWY 36: Trees.

RWY 09-27: 1920X60 (TURF)

RWY 09: Thld dsplcd 660'. P-line.

RWY 27: Trees.

AIRPORT REMARKS: Attended irregularly. No snow removal. Acft maintenance by prior arrangement; call arpt manager

on 734-654-6249. Rwy 09-27 thlds marked with tires; Rwy 09 dsplcd thld marked with 3 yellow tires each

side. Rwy 18-36 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

DETROIT

COPTER

LOC/DME I-MAY
108.55
Chan **22**

APP CRS
070°

Rwy Idg **5000**
TDZE **1307**
Apt Elev **1307**

ILS or LOC RWY 7
CADILLAC / WEXFORD COUNTY (CAD)

ADF Required. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all DA 137 feet and all MDA 140 feet and increase S-ILS 7 all Cats visibility ½ mile, S-LOC 7 visibility Cat C ½ mile and Cat D ¼ mile, Circling visibility Cat C ½ mile and Cat D ¼ mile. Inoperative table does not apply to S-LOC 7 Cat C visibility when using Houghton Lake altimeter setting.

MALS



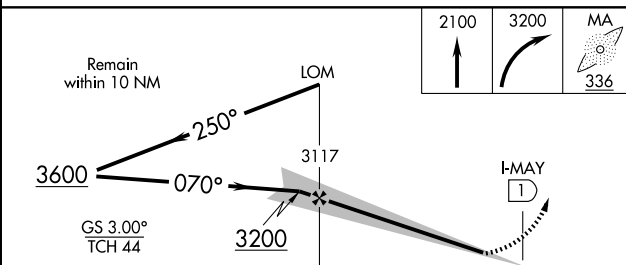
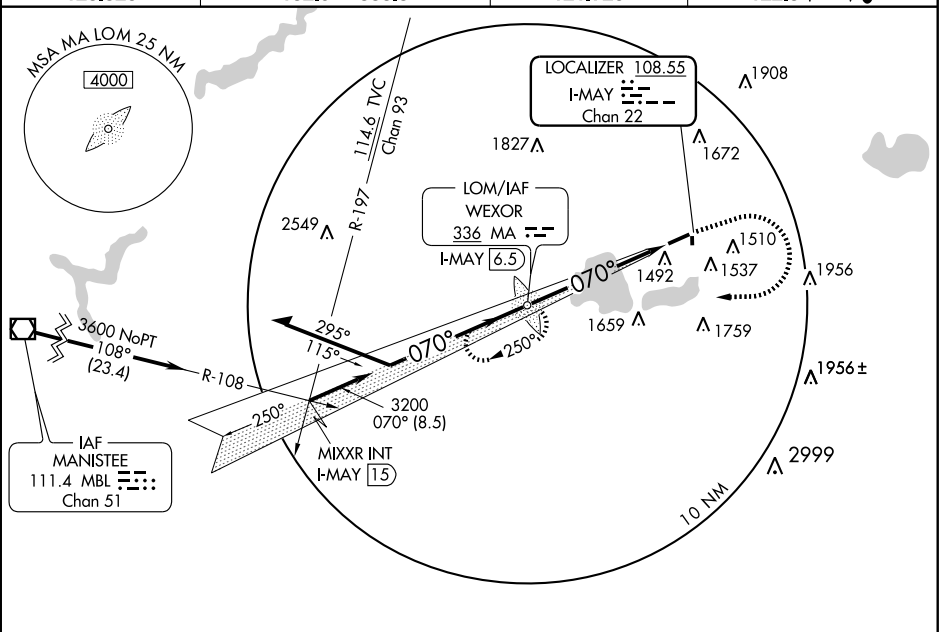
MISSED APPROACH: Climb to 2100, then climbing right turn to 3200 direct WEXOR LOM I-MAY 6.5 DME and hold.

AWOS-3
128.325

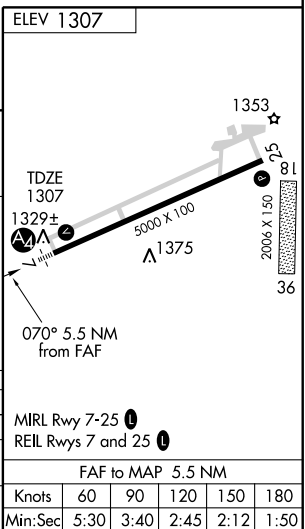
MINNEAPOLIS CENTER
132.9 338.3

GCO
121.725

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
S-ILS 7	1507-¾	200 (200-¾)		
S-LOC 7	1660-¾	353 (400-¾)	1660-1¼	353 (400-1¼)
CIRCLING	1860-1	553 (600-1)	1860-1½	573 (600-2)



NDB CAD 269	APP CRS 079°	Rwy Idg TDZE Apt Elev	5000 1307 1307
-----------------------	------------------------	-----------------------------	---

NDB RWY 7

CADILLAC / WEXFORD COUNTY (CAD)

⚠ When local alimeter setting not received, use Houghton Lake alimeter setting and increase all MDA 140 feet. Increase S-7 Cats A and C visibility ½ mile, Cat B and D ¼ mile, Circling Cat A, B and D visibility ¼ mile, Cat C ½ mile. Inoperative table does not apply to S-7 Cat B/C visibility and S-7 all Cats visibility when using Houghton Lake alimeter setting.

MAIS

A₂ =

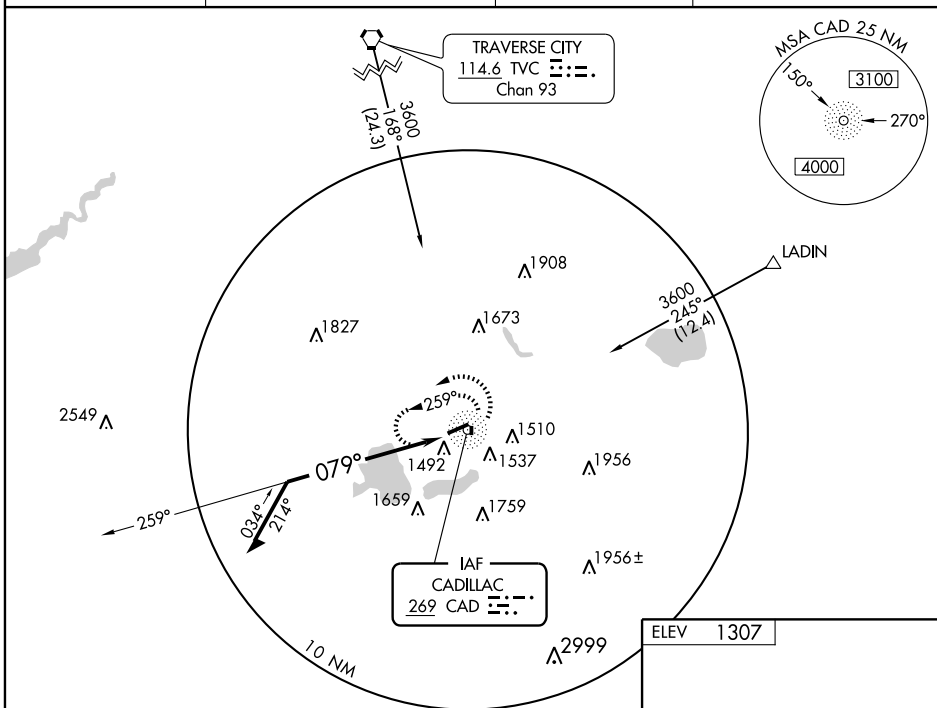
MISSED APPROACH:
Climbing left turn to 3600 in CAD NDB holding pattern.

AWOS-3
128.325

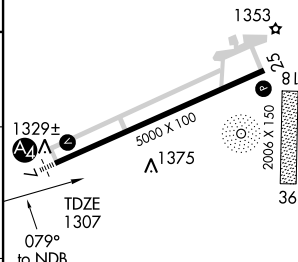
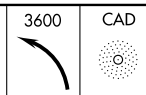
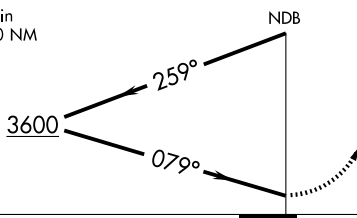
MINNEAPOLIS CENTER
132.9 338.3

GCO
121.725

UNICOM
122.8 (CTAF) 0



Remain
within 10 NM



CATEGORY	A	B	C	D
S-7	2120-¾ 813 (900-¾)	2120-1¼ 813 (900-1¼)	2120-2½ 813 (900-2½)	2120-2¾ 813 (900-2¾)
CIRCLING	2120-1 813 (900-1)	2120-1¼ 813 (900-1¼)	2120-2½ 813 (900-2½)	2120-2¾ 813 (900-2¾)

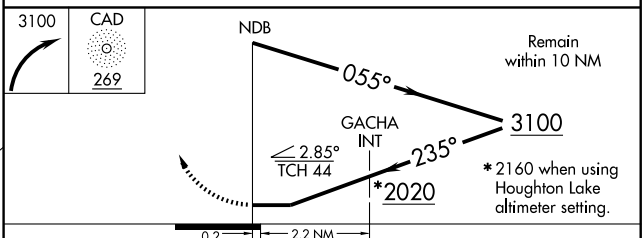
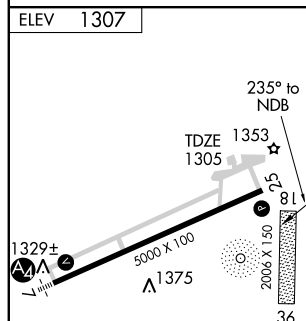
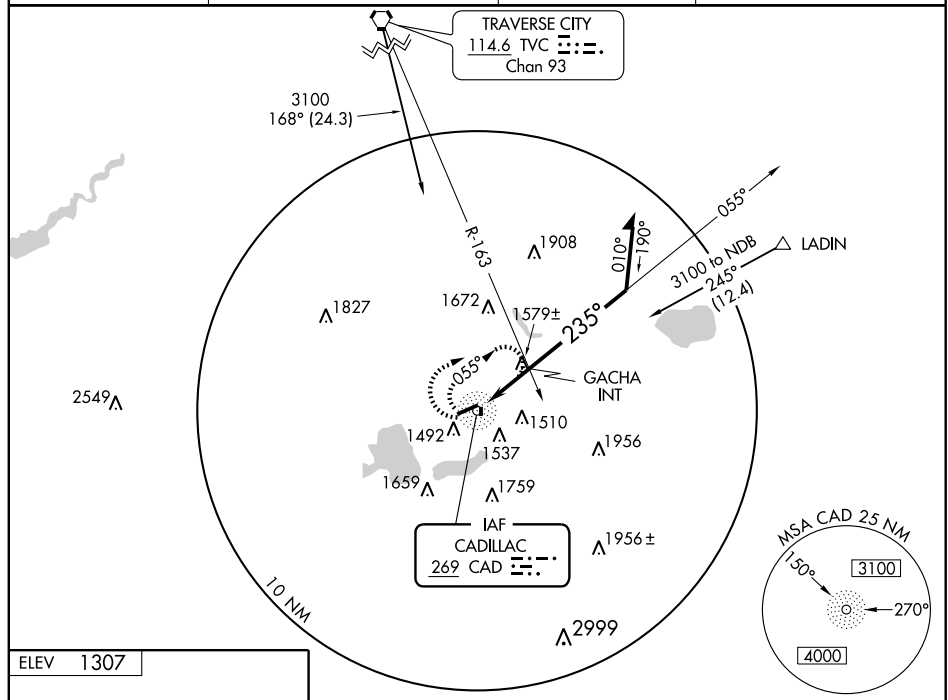
MIRL Rwy 7-25 0
REIL Rwy 7 and 25 0

NDB RWY 25

CADILLAC / WEXFORD COUNTY (CAD)

NDB CAD 269	APP CRS 235°	Rwy Idg TDZE Apt Elev	5000 1305 1307
-----------------------	------------------------	-----------------------------	---

<div><div><div></div><div></div></div><div></div></div>	Visibility reduction by helicopters NA. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 140 feet, S-25 and Circling visibilities Cat B ¼ mile, Cats C and D ½ mile. Increase GACHA fix minimums S-25 visibilities Cats C and D ½ mile, Circling Cat C ½ mile, Cat D ¼ mile.	MISSED APPROACH: Climbing right turn to 3100 in CAD NDB holding pattern.	
AWOS-3 128.325	MINNEAPOLIS CENTER 132.9 338.3	GCO 121.725	UNICOM 122.8 (CTAF) 0



CATEGORY	A	B	C	D
S-25	2020-1 715 (800-1)	2020-2 715 (800-2)	2020-2 715 (800-2)	2020-2¼ 715 (800-2¼)
CIRCLING	2020-1 713 (800-1)	2020-2 713 (800-2)	2020-2 713 (800-2)	2020-2¼ 713 (800-2¼)
GACHA MINIMUMS				
S-25	1880-1 575 (600-1)	1880-1½ 575 (600-1½)	1880-1½ 575 (600-1½)	1880-1¾ 575 (600-1¾)
CIRCLING	1880-1 573 (600-1)	1880-1½ 573 (600-1½)	1880-1½ 573 (600-1½)	1880-2 573 (600-2)

WAAS CH 86413 W07A	APP CRS 070°	Rwy Idg 5000 TDZE 1307 Apt Elev 1307
--	------------------------	---

RNAV (GPS) RWY 7

CADILLAC / WEXFORD COUNTY (CAD)

- ▼** DME/DME RNP-0.3 NA. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all DA 137 feet and all MDA 140 feet, LPV and LNAV/VNAV visibility ½ mile all Cats, LNAV Cats C/D visibility ½ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile. Inoperative table does not apply to LNAV Cat C visibilities.
- ▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Baro-VNAV and VDP NA when using Houghton Lake altimeter setting.

MALS

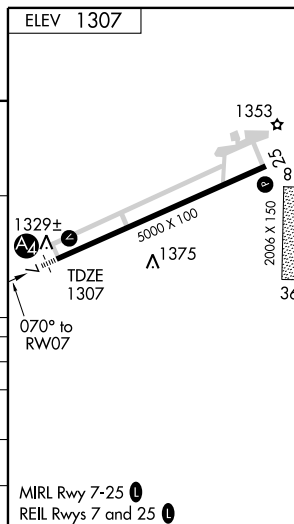
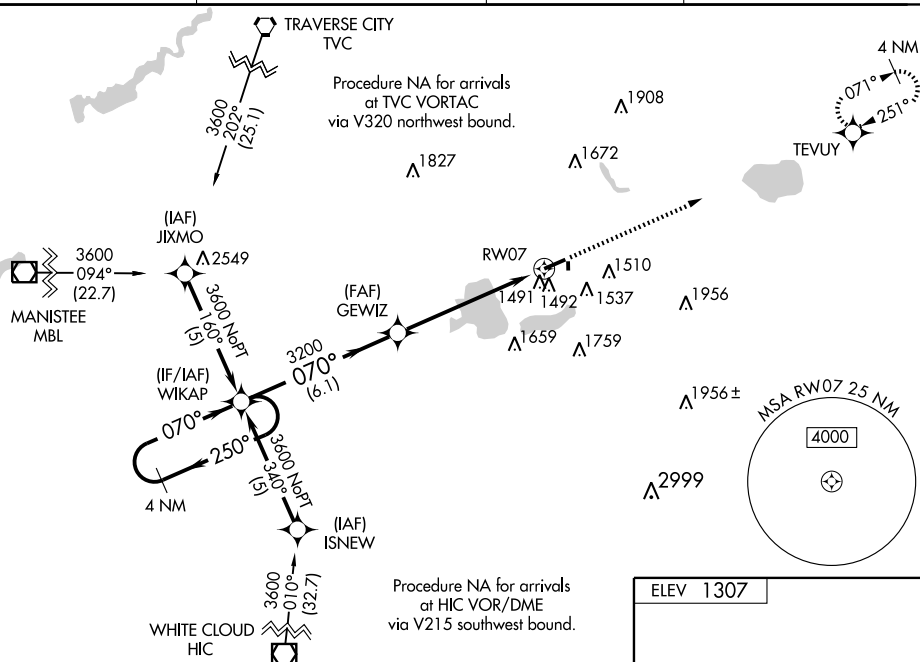


MISSED APPROACH:
Climb to 3000 direct
TEVUY and hold.

AWOS-3
128.325

MINNEAPOLIS CENTER
132.9 338.3

GCO
121.725

UNICOM
122.8 (CTAF) **L**

4 NM Holding Pattern

WIKAP

VGS1 and RNAV glidepath not coincident.

3000

TEVUY

3600

250°

070°

070°

GEWIZ

3200

*1.4 NM to RW07

RW07

*LNAV only

6.1 NM

4.3 NM

1.4 NM

GS 3.00°

TCH 45

CATEGORY	A	B	C	D
LPV DA		1507-3 $\frac{3}{4}$	200 (200-3 $\frac{3}{4}$)	
LNAV/VNAV DA		1761-1 $\frac{1}{2}$	454 (500-1 $\frac{1}{2}$)	
LNAV MDA	1780-3 $\frac{3}{4}$	473 (500-3 $\frac{3}{4}$)	1780-1 $\frac{1}{4}$ 473 (500-1 $\frac{1}{4}$)	1780-1 $\frac{1}{2}$ 473 (500-1 $\frac{1}{2}$)
CIRCLING	1860-1	553 (600-1)	1860-1 $\frac{1}{2}$ 553 (600-1 $\frac{1}{2}$)	1880-2 573 (600-2)

CADILLAC, MICHIGAN
Orig-A 06MAY10

44°17'N - 85°25'W

CADILLAC / WEXFORD COUNTY (CAD)
RNAV (GPS) RWY 7

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

WAAS CH 97513 W25A	APP CRS 250°	Rwy Idg TDZE Apt Elev	5000 1305 1307
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 25

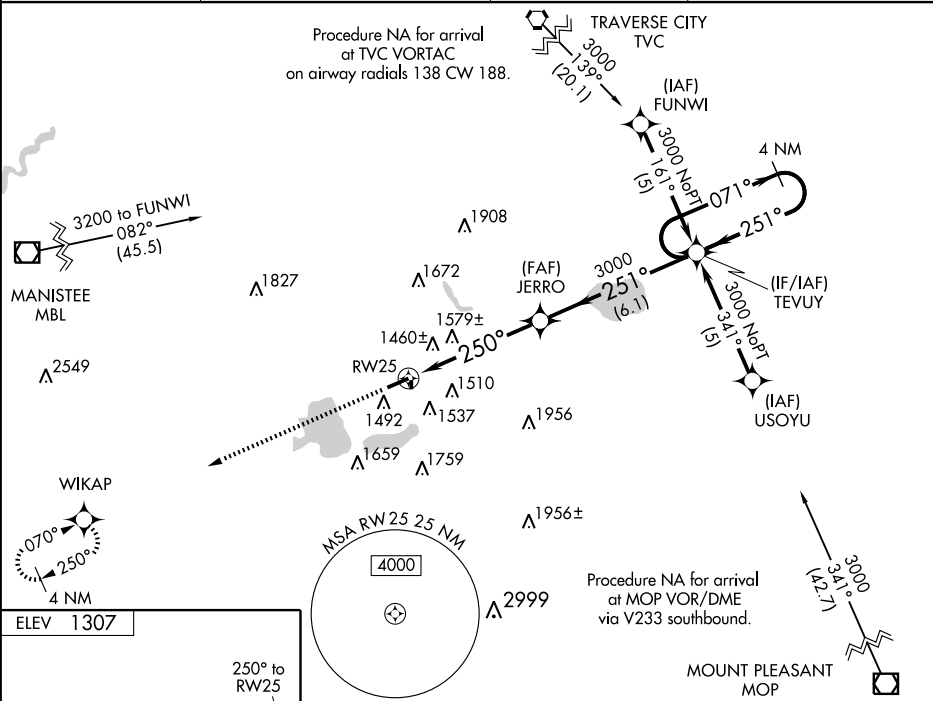
CADILLAC / WEXFORD COUNTY (CAD)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Baro-VNAV and VDP NA when using Houghton Lake altimeter setting. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all DA 137 feet, all MDA 140 feet, LPV and LNAV/VNAV visibilities all Cats ½ mile, LNAV visibilities Cats C and D ½ mile, Circling visibilities Cat C ½ mile and Cat D ¼ mile.

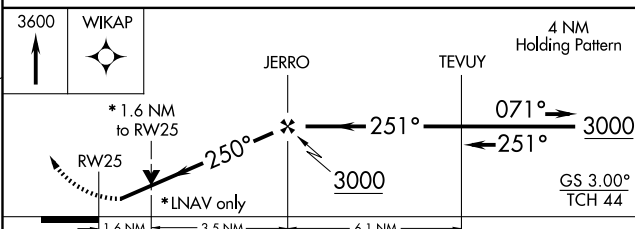
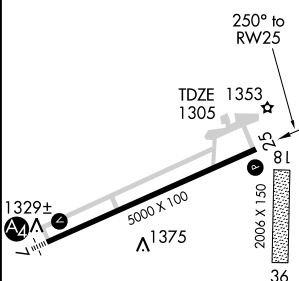
MISSED APPROACH: Climb to 3600 direct WIKAP and hold.

AWOS-3 128.325	MINNEAPOLIS CENTER 132.9 338.3	GCO 121.725	UNICOM 122.8 (CTAF) 0
--------------------------	--	-----------------------	--

Procedure NA for arrival
at TVC VORTAC
on airway radials 138 CW 188.



ELEV 1307



CATEGORY	A	B	C	D
LPV DA	1625-1¼		320 (400-1¼)	
LNAV/VNAV DA	1869-2		564 (600-2)	
LNAV MDA	1840-1	535 (600-1)	1840-1½ 535 (600-1½)	1840-1¾ 535 (600-1¾)
CIRCLING	1860-1	553 (600-1)	1860-1½ 553 (600-1½)	1880-2 573 (600-2)

MRL Rwy 7-25 **0**
REIL Rws 7 and 25 **0**

CARO

TUSCOLA AREA (CFS) 3 SW UTC-5(-4DT) N43°27.53' W83°26.73'

701 B S4 FUEL 100LL, JET A NOTAM FILE CFS

RWY 05-23: H4300X75 (ASPH) MIRL 0.4% up NE.

RWY 05: REIL. PAPI (P4L)—GA 3.0° TCH 25'. Trees.

RWY 23: REIL. PAPI(P4L)—GA 4.0°. Trees.

RWY 12-30: 2300X110 (TURF)

RWY 12: Trees. RWY 30: Thld dsplcd 500'. Trees.

AIRPORT REMARKS: Attended irregularly. For fuel after hrs call 989-673-2849; if arpt manager is unavbl call 989-673-2849. Deer on arpt. ACTIVATE MIRL Rwy 05-23; REIL and PAPI Rwy 05 and 23—CTAF. Rwy 12-30 thlds and dsplcd thlds marked with cones.

WEATHER DATA SOURCES: AWOS-3 119.275 (989) 672-4182.

COMMUNICATIONS: CTAF/UNICOM 123.0

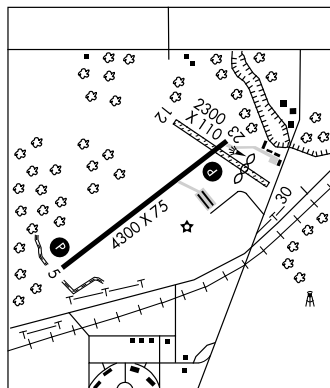
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z‡)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 102° 27.9 NM to fld. 663/3W. HIWAS.



DETROIT
L-281, 31C
IAP

CARSONVILLE

CIRCLE U HELIPORT (2F2) 5 SW UTC-5(-4DT) N43°29.49' W82°37.42'

729 NOTAM FILE LAN

HELIPAD H1: H47X17 (CONC)

HELIPORT REMARKS: Attended dusk-dawn. Apch departure routes 340°-020° and 115°-140°. Helipad H1 perimeter lgts. Perimeter lgts OTS indef.

COMMUNICATIONS: CTAF/UNICOM 123.05

DETROIT

CHARLEVOIX MUNI (CVX) 1 SW UTC-5(-4DT) N45°18.29' W85°16.52'

669 B S4 FUEL 100LL, JET A NOTAM FILE CVX

RWY 09-27: H4550X75 (ASPH) S-12.5 MIRL 0.6% up W

RWY 09: REIL. PAPI(P4R)—GA 3.0°. Tree.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 31'. Trees.

RWY 04-22: 1280X200 (TURF)

RWY 04: Trees. RWY 22: Tree.

AIRPORT REMARKS: Attended dawn-dusk. For fuel dawn-dusk call 231-547-2141. After hrs call 231-547-2058. Rwy 04-22 CLOSED Nov-Apr. Deer and birds on and invof arpt. Rwy 09 preferred rwy for ldg ngts, jets and turboprop acft. Rwy 27 preferred rwy for tkf ngts, jets and turboprop acft. Rwy 09-27 slopes up from E to W. -100' quarry/mine, 300' from Rwy 9 thld. ACTIVATE MIRL Rwy 09-27; REIL and PAPI Rwy 09 and Rwy 27—CTAF. Rwy 04-22 marked with 3' yellow cones. Landing fee. Landing fee waived with minimum fuel purchase.

WEATHER DATA SOURCES: AWOS-3 120 (231) 237-9703.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6 GCO 121.725

(MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

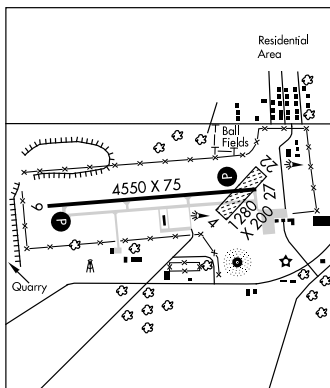
PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 239° 32.4 NM to fld. 840/6W. HIWAS

NDB (MHW) 392 CVX N45°18.11' W85°15.20' at fld. NOTAM FILE CVX. Unmonitored. NDB unusable byd 15 NM.

COMM/NAV/WEATHER REMARKS: GCO OTS indef.

GREEN BAY
L-31B
IAP



APP CRS **058°**
Rwy Idg **4300**
TDZE **692**
Apt Elev **701**

RNAV (GPS) RWY 5

CARO / TUSCOLA AREA (CFS)

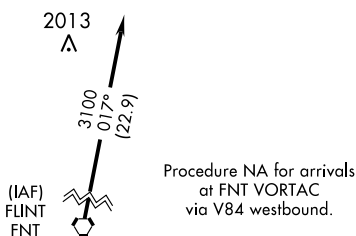
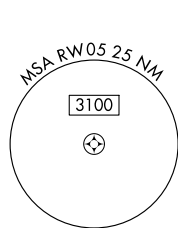
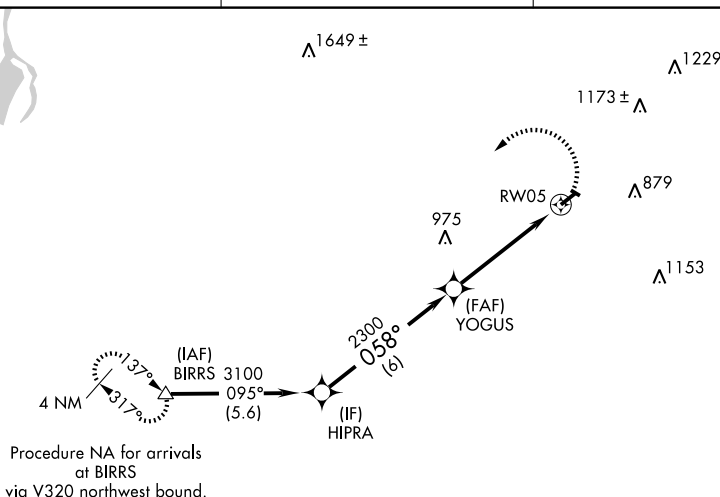
⚠ When local altimeter setting not received, use Saginaw/MBS Intl altimeter setting and increase all MDA 80 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3100 direct BIRRS and hold.

AWOS-3
119.275

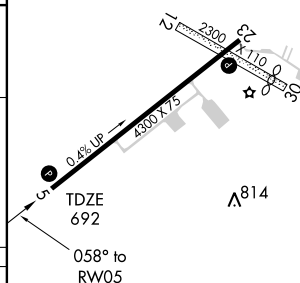
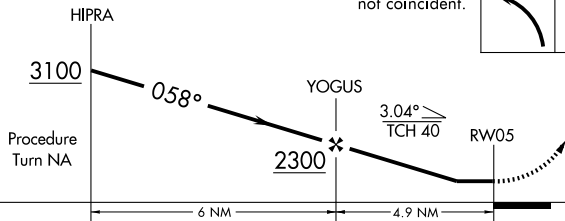
SAGINAW APP CON ★
120.95 235.625

UNICOM
123.0 (CTAF) 0



ELEV 701

VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
RNAV MDA	1100-1	408 (400-1)	NA	
CIRCLING	1220-1	519 (600-1)	NA	

REIL Rwy 5 and 23 0
MIRL Rwy 5-23 0

APP CRS 238°	Rwy Idg 4300
	TDZE 701
	Apt Elev 701

RNAV (GPS) RWY 23

CARO / TUSCOLA AREA (CFS)

⚠ When local altimeter setting not received, use Saginaw/MBS Intl altimeter setting and increase all MDA 80 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

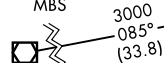
MISSED APPROACH: Climb to 3100 direct YOGUS and via 256° track to BIRRS and hold.

AWOS-3
119.275

SAGINAW APP CON ★
120.95 235.625

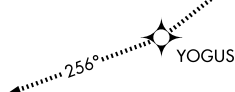
UNICOM
123.0 (CTAF) 0

SAGINAW MBS



Procedure NA for arrivals at MBS VORTAC via V320 northwest bound.

△ 1649±



(IAF) JULIS

2300

(5)

148°

(IF) RAYOL

2300

(6)

238°

(5)

(IAF) TISPE

2300

(5)

328°

1229△

1173±△

(FAF) KAYET

909±△

RW23

879△

LIYIG
2.6 NM
to RW23

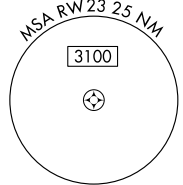
1153△

WINTO △

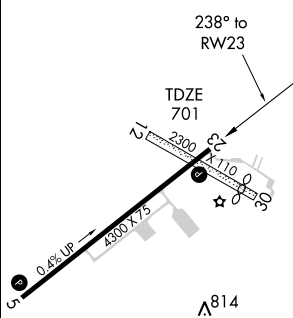
2400

023°

(9.1)



ELEV 701



REIL Rws 5 and 23 0
MIRL Rwy 5-23 0

3100 YOGUS 256° TRK BIRRS VGSI and descent angles not coincident.

	KAYET		RAYOL	
	LIYIG 2.6 NM to RW23		238° <u>2300</u>	
	1560		2300	
	2.6 NM		2.2 NM	
	3.04° TCH 40		6 NM	
	RW23		Procedure Turn NA	
CATEGORY	A	B	C	D
LNVA MDA	1160-1	459 (500-1)	NA	
CIRCLING	1220-1	519 (600-1)	NA	

VOR/DME MBS 112.9 Chan 76	APP CRS 102°	Rwy Idg N/A TDZE N/A Apt Elev 701
---	------------------------	--

VOR/DME-A
CARO / TUSCOLA AREA (CFS)

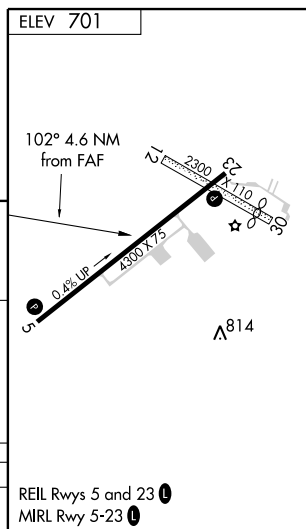
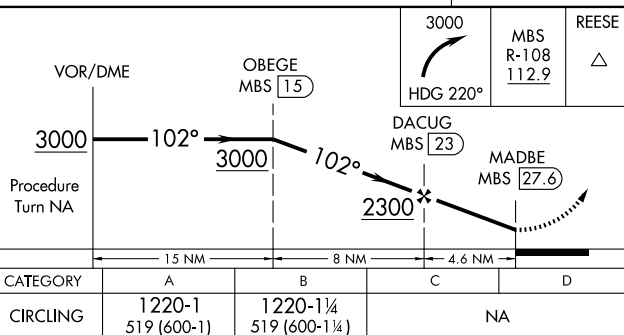
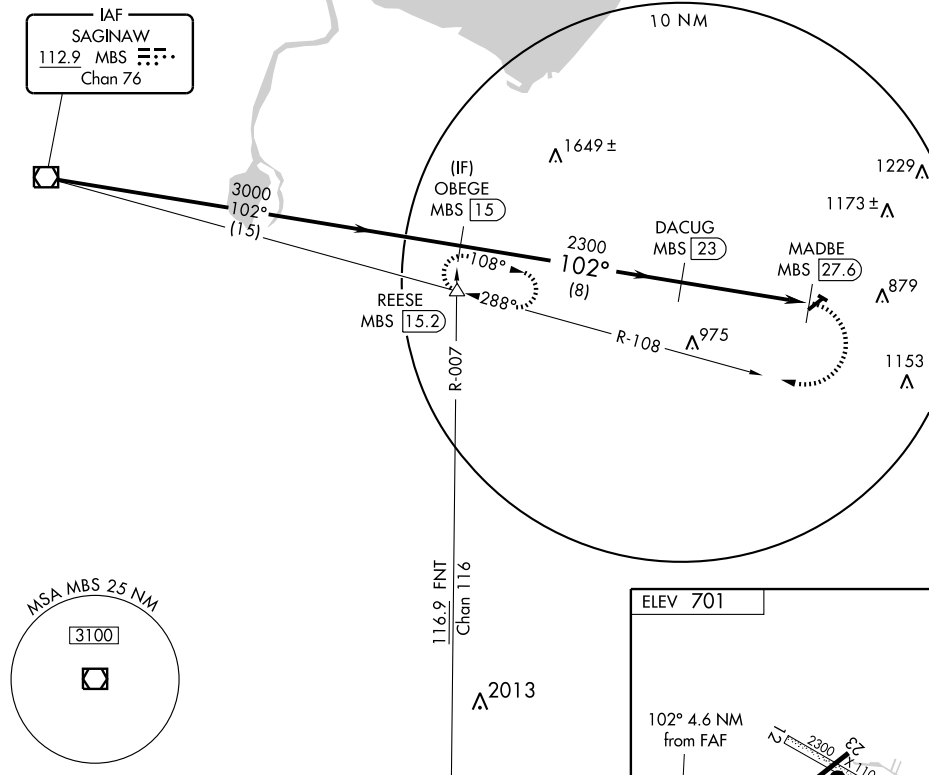
T When local altimeter setting not received, use
A Saginaw/MBS Intl altimeter setting and increase
all MDA 80 feet.

MISSED APPROACH: Climbing right turn to 3000 via heading 220° and MBS VOR/DME R-108 to REESE INT and hold.

AWOS-3
119,275

SAGINAW APP CON★
120.95 235.625

UNICOM
123.0 (CTAF) **L**



CARO, MICHIGAN
Amdt 5 10098

CARO / TUSCOLA AREA (CFS)
VOR/DME-A

43°28'N - 83°27'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

CARO

TUSCOLA AREA (CFS) 3 SW UTC-5(-4DT) N43°27.53' W83°26.73'

701 B S4 FUEL 100LL, JET A NOTAM FILE CFS

RWY 05-23: H4300X75 (ASPH) MIRL 0.4% up NE.

RWY 05: REIL. PAPI (P4L)—GA 3.0° TCH 25'. Trees.

RWY 23: REIL. PAPI(P4L)—GA 4.0°. Trees.

RWY 12-30: 2300X110 (TURF)

RWY 12: Trees. RWY 30: Thld dsplcd 500'. Trees.

AIRPORT REMARKS: Attended irregularly. For fuel after hrs call 989-673-2849; if arpt manager is unavbl call 989-673-2849. Deer on arpt. ACTIVATE MIRL Rwy 05-23; REIL and PAPI Rwy 05 and 23—CTAF. Rwy 12-30 thlds and dsplcd thlds marked with cones.

WEATHER DATA SOURCES: AWOS-3 119.275 (989) 672-4182.

COMMUNICATIONS: CTAF/UNICOM 123.0

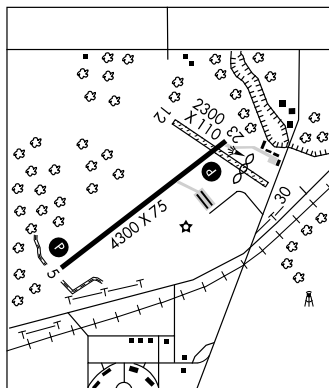
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z‡)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 102° 27.9 NM to fld. 663/3W. HIWAS.



CARSONVILLE

CIRCLE U HELIPORT (2F2) 5 SW UTC-5(-4DT) N43°29.49' W82°37.42'

729 NOTAM FILE LAN

HELIPAD H1: H47X17 (CONC)

HELIPORT REMARKS: Attended dusk-dawn. Apch departure routes 340°-020° and 115°-140°. Helipad H1 perimeter lgts. Perimeter lgts OTS indef.

COMMUNICATIONS: CTAF/UNICOM 123.05

DETROIT

CHARLEVOIX MUNI (CVX) 1 SW UTC-5(-4DT) N45°18.29' W85°16.52'

669 B S4 FUEL 100LL, JET A NOTAM FILE CVX

RWY 09-27: H4550X75 (ASPH) S-12.5 MIRL 0.6% up W

RWY 09: REIL. PAPI(P4R)—GA 3.0°. Tree.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 31'. Trees.

RWY 04-22: 1280X200 (TURF)

RWY 04: Trees. RWY 22: Tree.

AIRPORT REMARKS: Attended dawn-dusk. For fuel dawn-dusk call 231-547-2141. After hrs call 231-547-2058. Rwy 04-22 CLOSED Nov-Apr. Deer and birds on and invof arpt. Rwy 09 preferred rwy for ldg ngts, jets and turboprop acft. Rwy 27 preferred rwy for tkf ngts, jets and turboprop acft. Rwy 09-27 slopes up from E to W. -100' quarry/mine, 300' from Rwy 9 thld. ACTIVATE MIRL Rwy 09-27; REIL and PAPI Rwy 09 and Rwy 27—CTAF. Rwy 04-22 marked with 3' yellow cones. Landing fee. Landing fee waived with minimum fuel purchase.

WEATHER DATA SOURCES: AWOS-3 120 (231) 237-9703.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6 GCO 121.725

(MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 239° 32.4 NM to fld. 840/6W. HIWAS

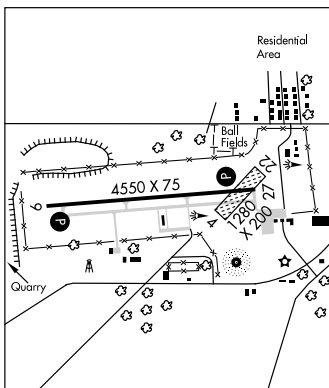
NDB (MHW) 392 CVX N45°18.11' W85°15.20' at fld. NOTAM FILE CVX. Unmonitored. NDB unusable byd 15 NM.

COMM/NAV/WEATHER REMARKS: GCO OTS indef.

GREEN BAY

L-31B

IAP



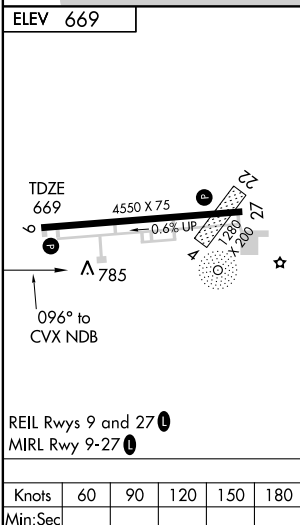
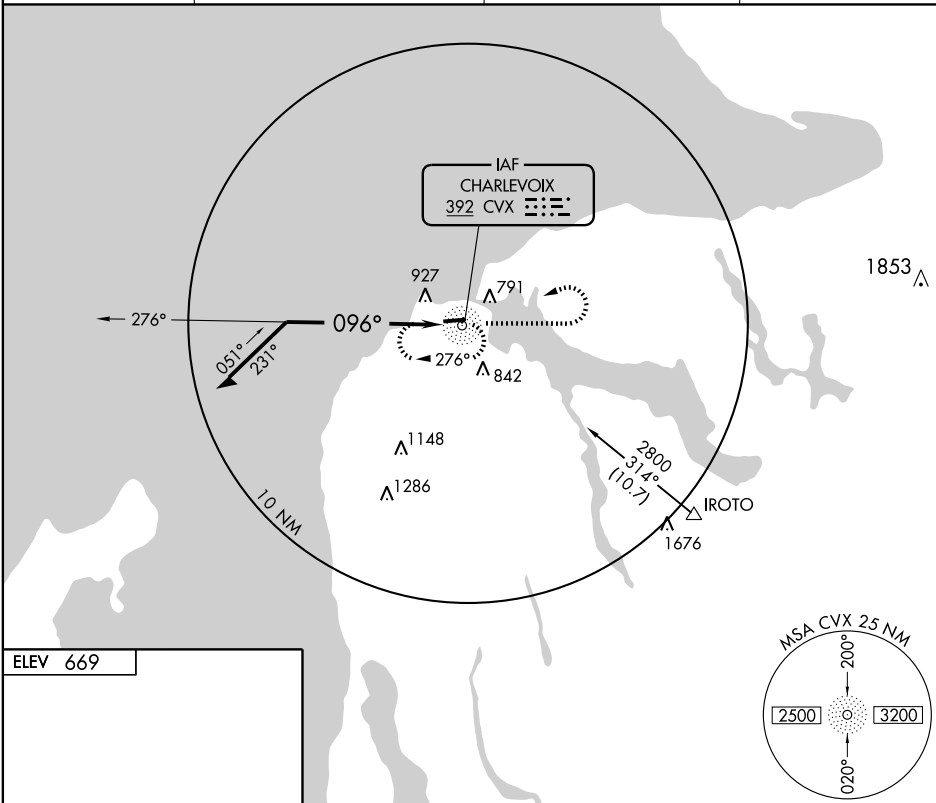
NDB CVX 392	APP CRS 096°	Rwy ldg TDZE Apt Elev	4550 669 669
-----------------------	------------------------	-----------------------------	---

NDB RWY 9

CHARLEVOIX MUNI (CVX)

<p>▼ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 80 feet.</p> <p>▲ NA Circling to Rwy 4/22 NA at night.</p>	<p>MISSED APPROACH: Climb to 2000 then climbing left turn to 2800 direct CVX NDB and hold.</p>
---	--

AWOS-3 120.0	MINNEAPOLIS CENTER 134.6 354.05	UNICOM 122.8 (CTAF) 0	GCO 121.725
------------------------	---	---------------------------------	-----------------------



<p>Remain within 10 NM</p> <p>NDB</p> <p>2800</p> <p>276°</p> <p>096°</p>		<p>2000</p> <p>2800</p> <p>CVX</p> <p>392</p>		
CATEGORY	A	B	C	D
S-9	1340-1	671 (700-1)	1340-2 671 (700-2)	1340-2 ¼ 671 (700-2 ¼)
CIRCLING	1340-1	671 (700-1)	1340-2 671 (700-2)	1340-2 ¼ 671 (700-2 ¼)

NDB CVX 392	APP CRS 255°	Rwy Idg TDZE 662 Apt Elev 669	4550
-----------------------	------------------------	---	-------------

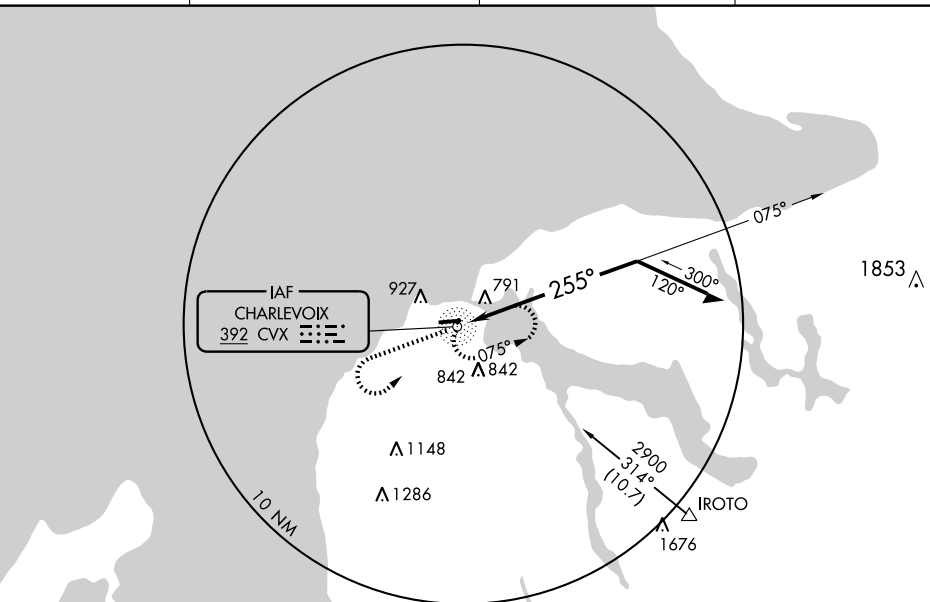
NDB RWY 27

CHARLEVOIX MUNI (CVX)

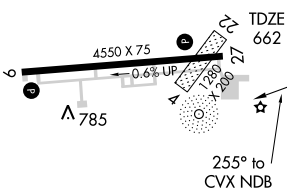
▼ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 80 feet.
▲ NA Circling to Rwy 4/22 NA at night.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2900 direct CVX NDB and hold.

AWOS-3 120.0	MINNEAPOLIS CENTER 134.6 354.05	UNICOM 122.8 (CTAF) 0	GCO 121.725
------------------------	---	---------------------------------	-----------------------



ELEV 669



REIL Rwy 9 and 27 **0**

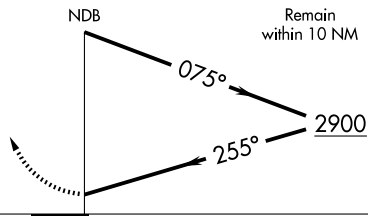
MIRL Rwy 9-27 **0**

Knots	60	90	120	150	180
Min:Sec					

CHARLEVOIX, MICHIGAN

Amdt 11 08157

2000	2900	CVX 392
------	------	------------



CATEGORY	A	B	C	D
S-27	1460-1 798 (800-1)	1460-1 1/4 798 (800-1 1/4)	1460-2 1/4 798 (800-2 1/4)	1460-2 1/2 798 (800-2 1/2)
CIRCLING	1460-1 791 (800-1)	1460-1 1/4 791 (800-1 1/4)	1460-2 1/4 791 (800-2 1/4)	1460-2 1/2 791 (800-2 1/2)

CHARLEVOIX MUNI (CVX)

NDB RWY 27

45°18'N - 85°17'W

WAAS CH 97708 W09A	APP CRS 090°	Rwy Idg 4550 TDZE 669 Apt Elev 669
--	------------------------	---

RNAV (GPS) RWY 9

CHARLEVOIX MUNI (CVX)

⚠ Circling to Rwy 4/22 NA at night. Baro-VNAV NA when using Pellston altimeter setting.
 For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Pellston altimeter setting and increase all DA 67 feet and all MDA 80 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV and Circling Cat C and D visibility ¼ mile.

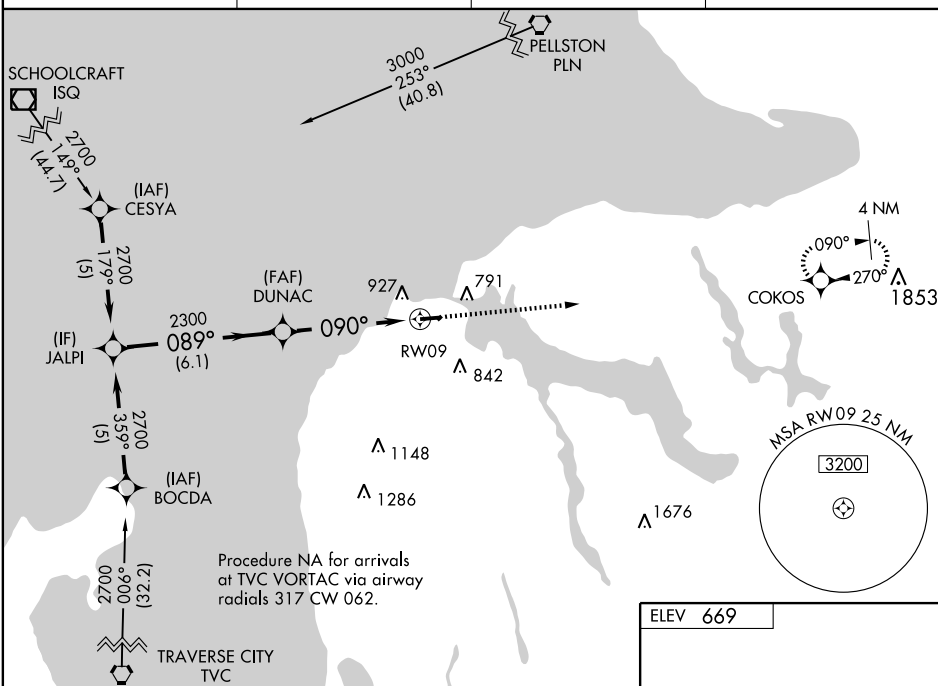
MISSED APPROACH: Climb to 3000 direct COKOS and hold.

AWOS-3
120.0

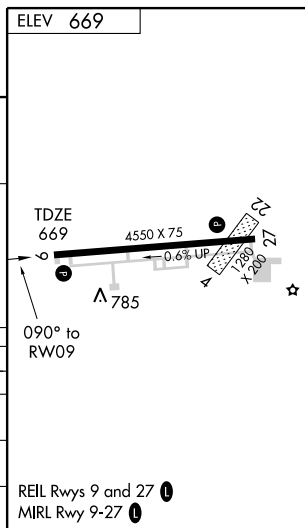
MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) 0

GCO
121.725



Procedure Turn NA				
JALPI				
2700				
GS 3.00°				
TCH 45°				
VGSi and RNAV glidepath not coincident.				
JALPI				
DUNAC				
RWY 09				
6.1 NM				
4.9 NM				
CATEGORY	A	B	C	D
LPV DA	919-1 250 (300-1)			
LNAV/VNAV DA	1203-2 534 (600-2)			
LNAV MDA	1160-1	491 (500-1)	1160-1½ 491 (500-1½)	1160-1½ 491 (500-1½)
CIRCLING	1280-1	611 (700-1)	1280-1¾ 611 (700-1¾)	1280-2 611 (700-2)



APP CRS 270°	Rwy Idg TDZE Apt Elev	4550 662 669
------------------------	-----------------------------	---

RNAV (GPS) RWY 27

CHARLEVOIX MUNI (CVX)



If local altimeter setting not received, use Pellston
altimeter setting and increase all MDAs 80 feet.
DME/DME RNP-0.3 NA. Circling to Rwy 4/22 NA at night.
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climbing left
turn to 3000 direct COKOS and hold.

AWOS-3

120.0

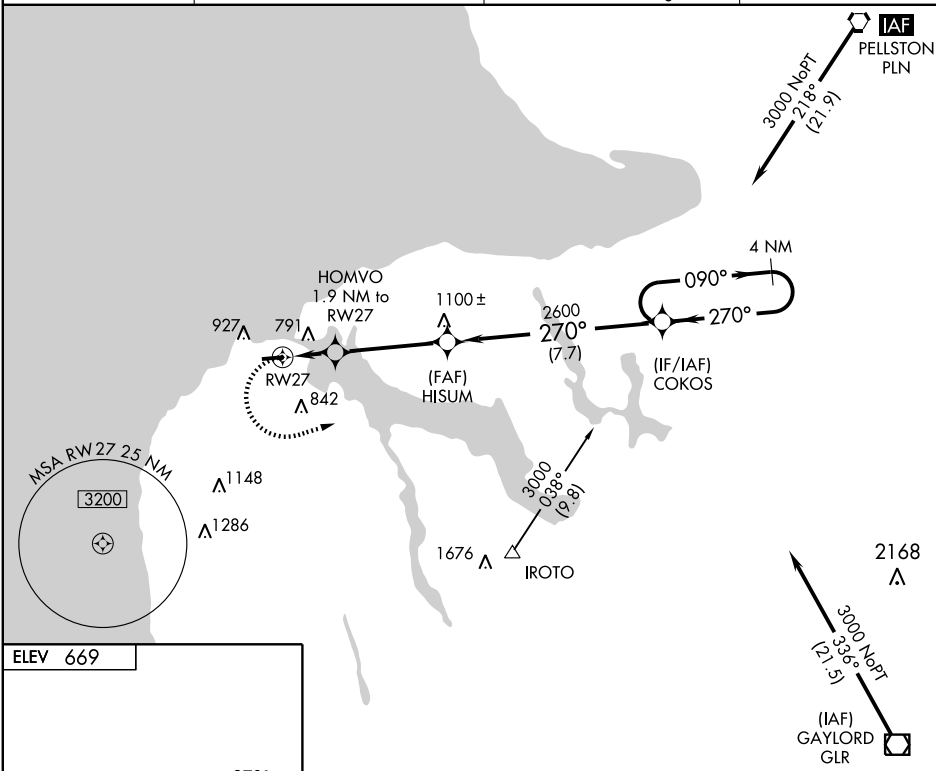
MINNEAPOLIS CENTER

134.6 354.05

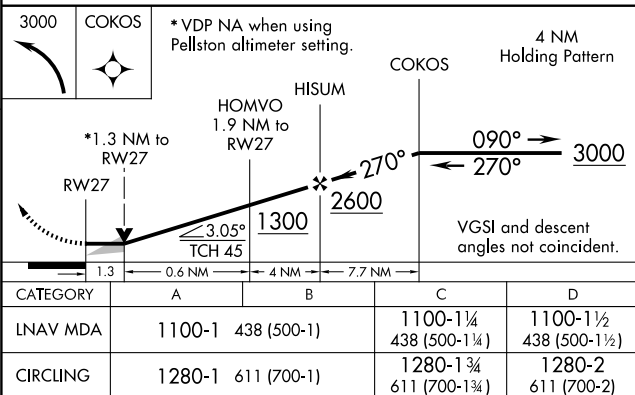
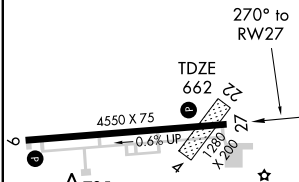
UNICOM

122.8 (CTAF) **1**

GCO

121.725

ELEV 669



REIL Rwy 9 and 27 **1**
MIRL Rwy 9-27 **1**

CHARLOTTE

FITCH H BEACH (FPK) 2 NE UTC-5(-4DT) N42°34.47' W84°48.69'

891 B S4 FUEL 100LL NOTAM FILE FPK

RWY 02-20: H3500X75 (CONC) S-26 MIRL 0.3% up S

RWY 02: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Trees.

RWY 20: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Pole.

RWY 14-32: 2318X100 (TURF)

RWY 14: Thld dspcd 575'. Trees.

RWY 32: Thld dspcd 189'. Road.

AIRPORT REMARKS: Attended 1300Z±—dusk. Military helicopter ops on and invof arpt, particularly at ngt. Be alert occasional deer on rwys. Rwy 14-32 CLOSED Dec-Mar and when snow covered. Rwy 14-32 thlds and dspcd thlds marked with 3' yellow cones.

ACTIVATE MIRL Rwy 02-20; REIL and PAPI Rwy 02 and 20—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.075 (517) 543-2288.

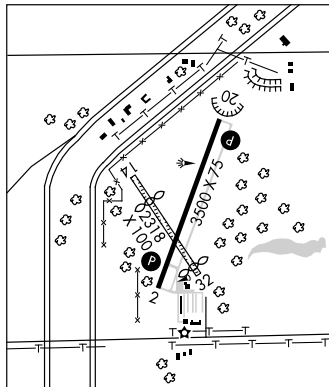
COMMUNICATIONS: CTAF/UNICOM 123.0

Ⓡ **LANSING APP/DEP CON** 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 216° 9.9 NM to fld. 887/5W.



WEND VALLEY (49G) 3 NW UTC-5(-4DT) N42°34.75' W84°54.50'

859 NOTAM FILE LAN

RWY 18-36: 1800X100 (TURF)

RWY 18: Trees. **RWY 36:** Trees.

AIRPORT REMARKS: Attended irregularly. No snow removal on Rwy 18-36. Arpt CLOSED Dec-Mar and when snow covered. Ultralight activity on and invof arpt. +30' p-line north end rwy. Rwy 18 and dspcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

CHEBOYGAN

CHEBOYGAN CO (SLH) 2 W UTC-5(-4DT) N45°39.22' W84°31.16'

640 B S4 FUEL 100LL, JET A NOTAM FILE SLH

RWY 10-28: H4005X75 (ASPH) S-23, D-34, 2D-60 MIRL 0.3% up W

RWY 10: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Road.

RWY 28: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Trees.

RWY 16-34: 1600X75 (TURF)

RWY 34: Thld dspcd 500'.

AIRPORT REMARKS: Attended 1300-2200Z±. 100LL 24 hr self-serve. For Jet A after hrs call 231-627-7921, 231-420-0334. Deer and birds on and invof arpt. Rwy 16-34 CLOSED Dec-Mar and when snow covered. Rwy 16-34 soft when wet. Rwy 16 rwy and dspcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and Rwy 28 and REIL Rwy 10 and Rwy 28—122.5.

WEATHER DATA SOURCES: AWOS-3 118.175 (231) 627-4671.

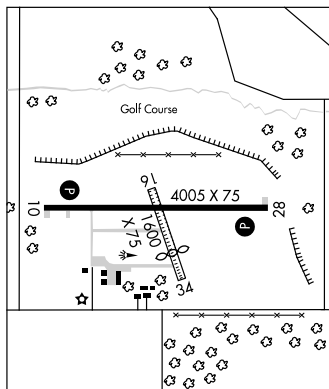
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 083° 6.3 NM to fld. 840/6W. HIWAS



HOFFMAN'S BLACK MOUNTAIN AERODROME (2M7) 11 SE UTC-5(-4DT)

N45°31.92' W84°18.48'

677 S4 NOTAM FILE LAN

RWY 15-33: 2800X90 (TURF)

RWY 15: Thld dspcd 1200'. Trees.

RWY 33: Thld dspcd 900'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 15-33 ditch on both sides of rwy. Rwy 15-33 soft when wet. Call 231-627-2418 to confirm rwy conditions. Rwy rough, uneven, tire ruts. Rwy 15-33 edges and dspcd thlds are marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

DETROIT

L-28J

IAP

DETROIT

LAKE HURON

L-31C

IAP

LAKE HURON

RNAV (GPS) RWY 20

CHARLOTTE / FITCH H. BEACH (F'PK)

APP CRS 204°	Rwy Idg TDZE Apt Elev	3500 891 891
------------------------	-----------------------------	---



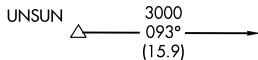
If local altimeter setting not received, use Capital Region Intl altimeter setting and increase all MDAs 60 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct KUBVE and left turn via 109° track to LESSY and hold.

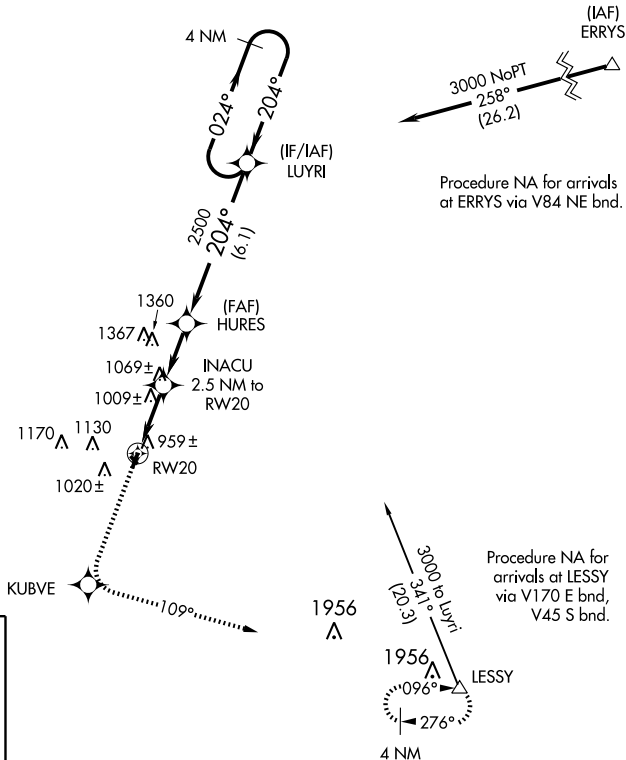
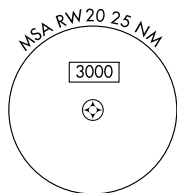
AWOS-3
118.075

LANSING APP CON
118.65 226.4

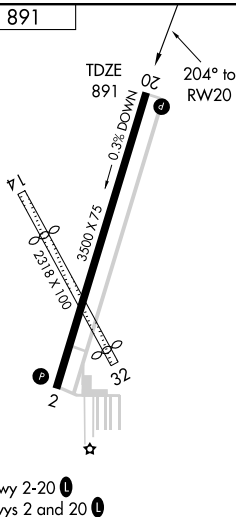
UNICOM
123.0 (CTAF) 0



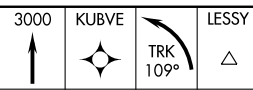
Procedure NA for arrivals at UNSUN via V510 W bnd.



ELEV 891

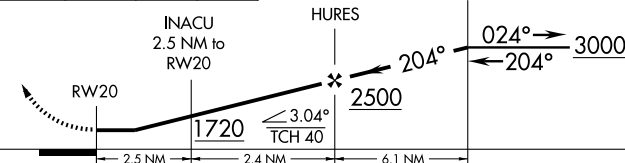


MIRL Rwy 2-20 0
REIL Rws 2 and 20 0



VGSI and descent angles not coincident.

4 NM Holding Pattern



CATEGORY	A	B	C	D
INAV MDA	1300-1	409 (500-1)	1300-1¼ 409 (500-1¼)	NA
CIRCLING	1420-1 529 (600-1)	1480-1 589 (600-1)	1480-1½ 589 (600-1½)	NA

VORTAC LAN 110.8 Chan 45	APP CRS 216°	Rwy Idg TDZE Apt Elev 3500 891 891
--	------------------------	--

VOR or GPS RWY 20

CHARLOTTE / FITCH H. BEACH (F'PK)



NA

Use Lansing altimeter setting.

MISSED APPROACH: Climb to 2500 via LAN R-216 then right turn direct LAN VORTAC and hold.

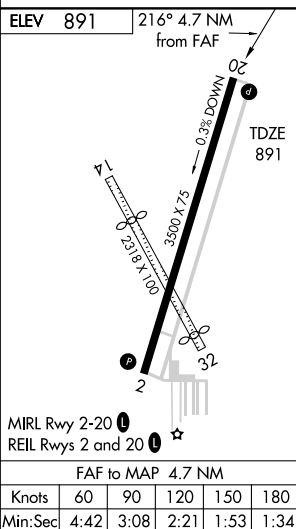
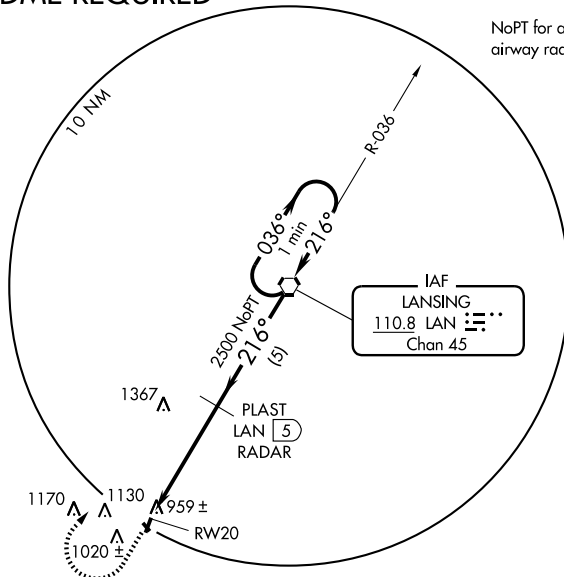
AWOS-3
118.075



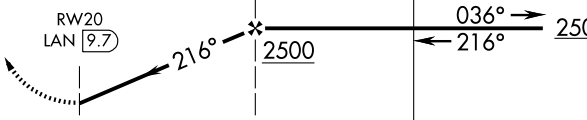
LANSING APP CON
118.65 226.4

UNICOM
123.0 (CTAF) **0**

RADAR or DME REQUIRED

NoPT for arrivals on LAN VORTAC
airway radials 324 CW 115.



1956				
2500 ↑ LAN R-216 110.8		LAN  110.8	PLAST LAN 5 RADAR	
RW20 LAN 9.7			VORTAC One Minute Holding Pattern	
			2500	
CATEGORY	A	B	C	D
S-20	1400-1	509 (600-1)	1400-1½ 509 (600-1½)	NA
CIRCLING	1460-1 569 (600-1)	1520-1 629 (700-1)	1520-1¾ 629 (700-1¾)	NA

CHARLOTTE

FITCH H BEACH (FPK) 2 NE UTC-5(-4DT) N42°34.47' W84°48.69'

DETROIT

891 B S4 FUEL 100LL NOTAM FILE FPK

L-28J

RWY 02-20: H3500X75 (CONC) S-26 MIRL 0.3% up S

IAP

RWY 02: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Trees.

RWY 20: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Pole.

RWY 14-32: 2318X100 (TURF)

RWY 14: Thld dspcd 575'. Trees.

RWY 32: Thld dspcd 189'. Road.

AIRPORT REMARKS: Attended 1300Z±—dusk. Military helicopter ops on and invof arpt, particularly at ngt. Be alert occasional deer on rwys. Rwy 14-32 CLOSED Dec-Mar and when snow covered. Rwy 14-32 thlds and dspcd thlds marked with 3' yellow cones.

ACTIVATE MIRL Rwy 02-20; REIL and PAPI Rwy 02 and 20—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.075 (517) 543-2288.

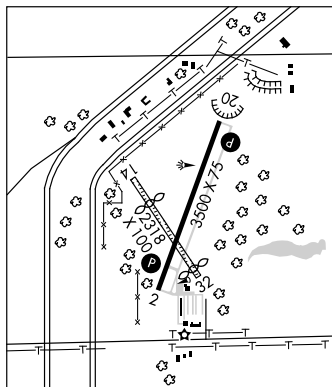
COMMUNICATIONS: CTAF/UNICOM 123.0

Ⓡ **LANSING APP/DEP CON** 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 216° 9.9 NM to fld. 887/5W.



WEND VALLEY (49G) 3 NW UTC-5(-4DT) N42°34.75' W84°54.50'

DETROIT

859 NOTAM FILE LAN

RWY 18-36: 1800X100 (TURF)

RWY 18: Trees. **RWY 36:** Trees.

AIRPORT REMARKS: Attended irregularly. No snow removal on Rwy 18-36. Arpt CLOSED Dec-Mar and when snow covered. Ultralight activity on and invof arpt. +30' p-line north end rwy. Rwy 18 and dspcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

CHEBOYGAN

CHEBOYGAN CO (SLH) 2 W UTC-5(-4DT) N45°39.22' W84°31.16'

LAKE HURON

640 B S4 FUEL 100LL, JET A NOTAM FILE SLH

L-31C

RWY 10-28: H4005X75 (ASPH) S-23, D-34, 2D-60 MIRL 0.3% up W

IAP

RWY 10: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Road.

RWY 28: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Trees.

RWY 16-34: 1600X75 (TURF)

RWY 34: Thld dspcd 500'.

AIRPORT REMARKS: Attended 1300-2200Z±. 100LL 24 hr self-serve. For Jet A after hrs call 231-627-7921, 231-420-0334. Deer and birds on and invof arpt. Rwy 16-34 CLOSED Dec-Mar and when snow covered. Rwy 16-34 soft when wet. Rwy 16 rwy and dspcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and Rwy 28 and REIL Rwy 10 and Rwy 28—122.5.

WEATHER DATA SOURCES: AWOS-3 118.175 (231) 627-4671.

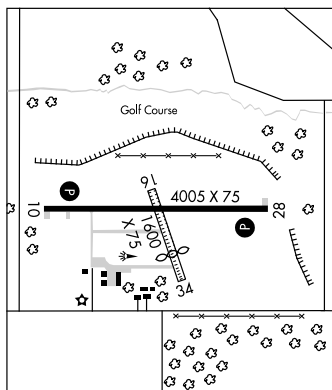
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 083° 6.3 NM to fld. 840/6W. HIWAS



HOFFMAN'S BLACK MOUNTAIN AERODROME (2M7) 11 SE UTC-5(-4DT)

LAKE HURON

N45°31.92' W84°18.48'

677 S4 NOTAM FILE LAN

RWY 15-33: 2800X90 (TURF)

RWY 15: Thld dspcd 1200'. Trees.

RWY 33: Thld dspcd 900'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 15-33 ditch on both sides of rwy. Rwy 15-33 soft when wet. Call 231-627-2418 to confirm rwy conditions. Rwy rough, uneven, tire ruts. Rwy 15-33 edges and dspcd thlds are marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

APP CRS **096°**
 Rwy Idg **4005**
 TDZE **641**
 Apt Elev **641**

RNAV (GPS) RWY 10

CHEBOYGAN COUNTY (SLH)

▼ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 60 feet.
 ▲ NA DME/DME RNP -0.3 NA.
 VDP NA with Pellston altimeter setting.

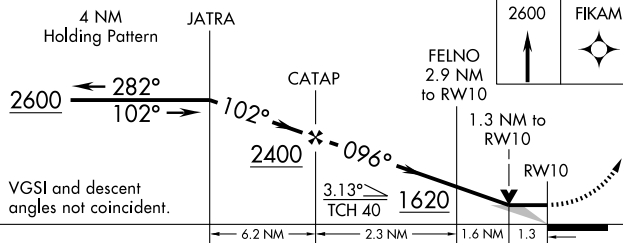
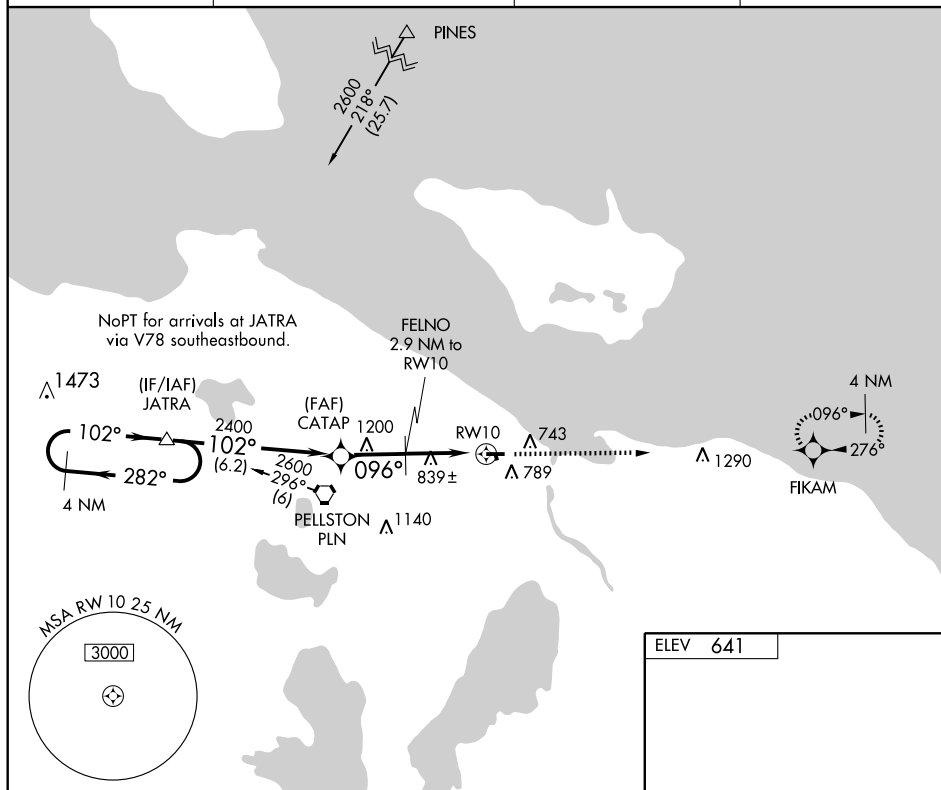
MISSED APPROACH: Climb to 2600 direct FIKAM and hold.

AWOS-3
118.175

MINNEAPOLIS CENTER
134.6 354.05

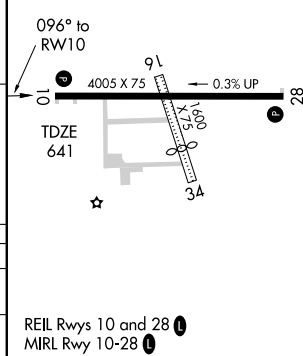
UNICOM
122.8 (CTAF)

122.5 0



CATEGORY	A	B	C	D
LNAV MDA	1100-1	459 (500-1)	1100-1½ 459 (500-1½)	NA
CIRCLING	1140-1	499 (500-1)	1140-1½ 499 (500-1½)	NA

ELEV **641**



APP CRS	Rwy Idg	4005
276°	TDZE	641
	Apt Elev	641

RNAV (GPS) RWY 28

CHEBOYGAN COUNTY (SLH)

▽ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 60 feet.
△ NA GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.

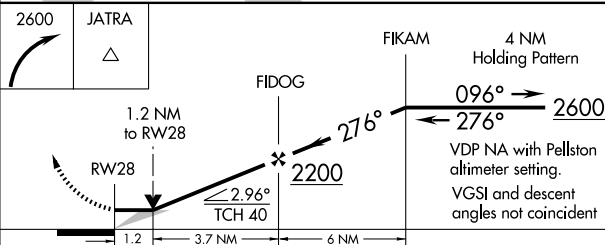
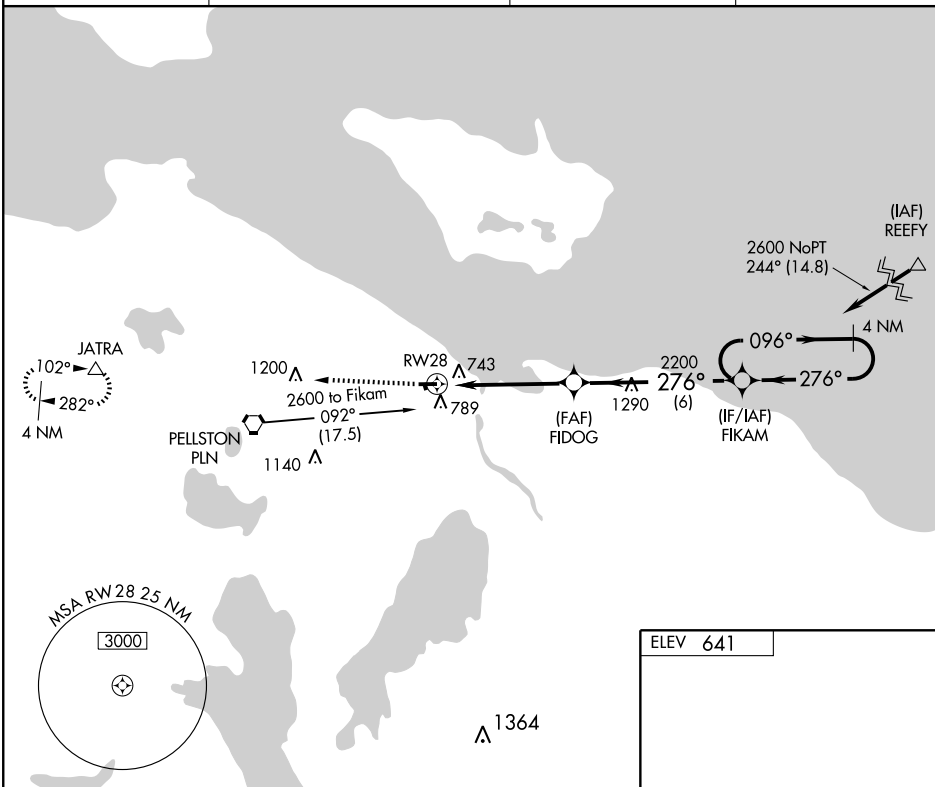
MISSED APPROACH: Climbing right turn to 2600 direct JATRA WP and hold.

AWOS-3
118.175

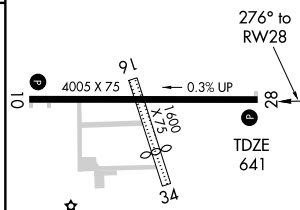
MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF)

122.5



ELEV **641**



CATEGORY	A	B	C	D
LNAV MDA	1060-1 419 (500-1)		1060-1½ 419 (500-1½)	NA
CIRCLING	1140-1 499 (500-1)		1140-1½ 499 (500-1½)	NA

REIL Rwy 10 and 28
MIRL Rwy 10-28

VORTAC PLN 111.8 Chan 55	APP CRS 082°	Rwy Idg TDZE Apt Elev 4005 641 641
--	------------------------	--

VOR RWY 10

CHEBOYGAN COUNTY (SLH)

▼ If local altimeter setting not received, use Pellston
 ▲ NA altimeter setting and increase all MDAs 60 feet.
 VDP NA when using Pellston altimeter setting.

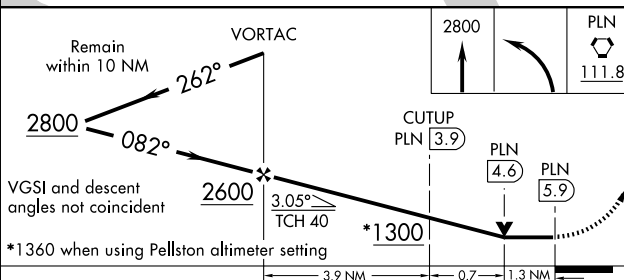
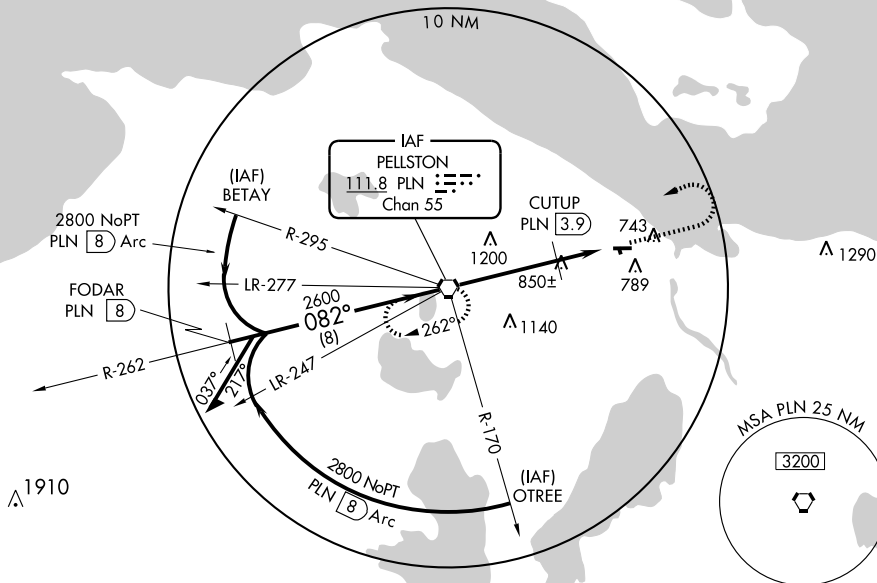
MISSED APPROACH: Climb to 2800 then
 left turn direct PLN VORTAC and hold.

AWOS-3
118.175

MINNEAPOLIS CENTER
134.6 354.05

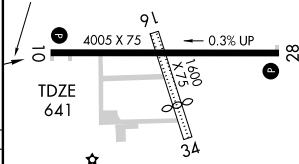
UNICOM
122.8 (CTAF)

122.5 0



ELEV **641**

082° 5.9 NM
 from FAF



CATEGORY	A	B	C	D
S-9	1300-1	659 (700-1)	1300-1¾ 659 (700-1¾)	NA
CIRCLING	1300-1	659 (700-1)	1300-1¾ 659 (700-1¾)	NA
DME MINIMUMS				
S-9	1100-1	459 (500-1)	1100-1¼ 459 (500-1¼)	NA
CIRCLING	1140-1	499 (500-1)	1140-1½ 499 (500-1½)	NA

REIL Rwy 10 and 28 0
 MIRL Rwy 10-28 0

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CHERRY CAPITAL (See TRAVERSE CITY)**CHESANING****HOWARD NIXON MEML** (50G) 1 W UTC-5(-4DT) N43°10.99' W84°08.00'

DETROIT

644 NOTAM FILE LAN

RWY 18-36: 2582X150 (TURF) LIRL

RWY 18: Thld dspcd 400'. Trees.

RWY 36: Thld dspcd 796'. Trees.

RWY 09-27: 2060X150 (TURF)

RWY 09: Trees. RWY 27: Thld dspcd 800'. Trees.

AIRPORT REMARKS: Attended irregularly. No winter snow removal. Rwy 18-36 marked with 3' yellow cones including dspcd thlds. Rwy 09-27 marked with 3' cones including dspcd thlds. ACTIVATE LIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF 122.9**CHIPPEWA CO INTL** (See SAULT STE MARIE)**CIRCLE U HELIPORT** (See CARSONVILLE)**CLAM LAKE** N44°53.96' W85°14.38' NOTAM FILE ACB.

GREEN BAY

NDB (MHW) 251 CXK 023° 5.6 NM to Antrim Co. Unmonitored.

L-31B

CLARE MUNI (48D) 1 E UTC-5(-4DT) N43°50.07' W84°44.41'

DETROIT

857 B FUEL 100LL NOTAM FILE LAN

L-28J, 31C

RWY 04-22: H3500X75 (ASPH) MIRL 0.9% up NE

IAP

RWY 04: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Trees.

RWY 22: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.

RWY 09-27: H2500X75 (ASPH) S-20 MIRL

RWY 09: Trees. RWY 27: Fence.

AIRPORT REMARKS: Attended irregularly. 24 hour self serve fuel avbl with credit card. Deer on and invof arpt. Rwy 22 REIL OTS indef. ACTIVATE MIRL Rwy 04-22, Rwy 09-27, REIL Rwy 04 and Rwy 22 and PAPI Rwy 04 and Rwy 22—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

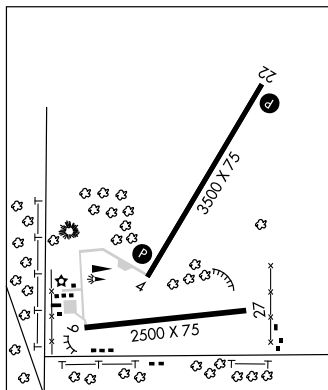
⑧ SAGINAW APP/DEP CON 126.45 (1130-0400Z‡)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1130Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

MOUNT PLEASANT (L) VORW/DME 110.6 MOP Chan

43 N43°37.37' W84°44.24' 004° 12.7 NM to fld.
752/5W.

**CLARE CO** (See HARRISON)**CLINTON****HONEY ACRES** (7N4) 1 W UTC-5(-4DT) N42°04.67' W83°59.16'

DETROIT

820 NOTAM FILE LAN

COPTER

RWY 18-36: 3800X90 (TURF)

RWY 18: Thld dspcd 600'. Tree.

RWY 36: Thld dspcd 600'. Bldg.

AIRPORT REMARKS: Attended irregularly. Rwy 36, +18' p-line 430' from thld marked with orange balls. Rwy 18-36 thlds and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

VOR/DME MOP
110.6
Chan **43**

APP CRS
004°

Rwy ldg
TDZE
Apt Elev

N/A
N/A
857

VOR or GPS-A
CLARE MUNI (48D)



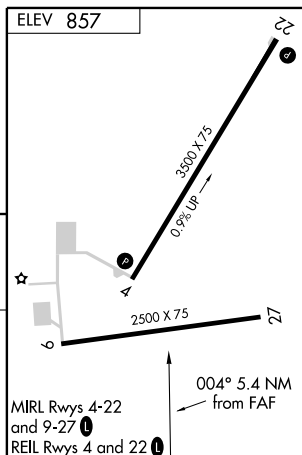
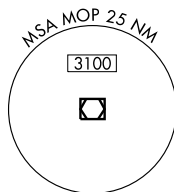
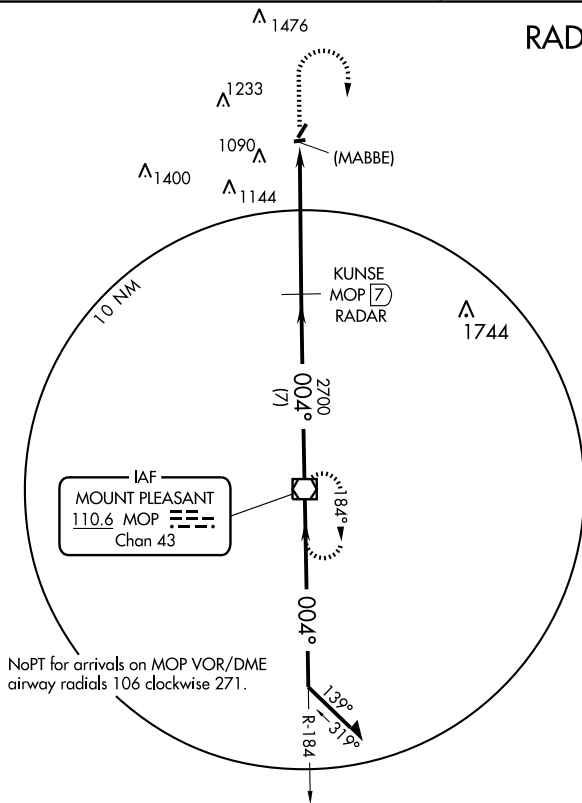
Use Saginaw altimeter setting.

MISSED APPROACH: Climb to 2700, then
right turn direct MOP VOR/DME and hold.

SAGINAW APP CON ★
126.45 235.625

UNICOM
122.8 (CTAF) 0

RADAR or DME REQUIRED



Remain within 10 NM VOR/DME

2700

MOP
110.6

2700

004°

2700

KUNSE
MOP 7
RADAR

(MABBE)
MOP
12.4

7 NM

5.4 NM

CATEGORY

A

B

C

D

CIRCLING

1580-1

723 (800-1)

NA

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CLIO

CAGNEY (51G) 3 SW UTC-5(-4DT) N43°08.58' W83°47.75'

DETROIT

722 S4 TPA-1722(1000) NOTAM FILE LAN

RWY 03-21: 1933X100 (TURF)

RWY 03: Trees. RWY 21: Tree.

RWY 14-32: 1895X140 (TURF)

RWY 14: Tree. RWY 32: Trees.

RWY 18-36: 1802X100 (TURF)

RWY 18: Thld dspcd 500'. Trees. RWY 36: Thld dspcd 358'. Trees.

AIRPORT REMARKS: Attended continuously. Deer on and invof arpt. Rwy 03-21, Rwy 14-32 and Rwy 18-36 rough.

Glider ops left and rgt t/c to all rws. Rwy 32 apch end wet in spring after rain. Rwy 18-36 marked with yellow cones. Rwy 03-21 and Rwy 14-32 irregularly defined by mowing. Rws 03-21 and 14-32 local use only. Check NOTAMS for rwy condition winter months-no snow removal.

COMMUNICATIONS: CTAF 122.9

COLDWATER

BRANCH CO MEML (OEB) 3 W UTC-5(-4DT) N41°56.01' W85°03.14'

CHICAGO

959 B S4 FUEL 100LL, JET A NOTAM FILE OEB

H-5E, 10F, L-281

RWY 07-25: H5350X75 (ASPH) S-20 MIRL

RWY 07: PAPI(P2L)-GA 3.0° TCH 32'. Trees.

RWY 25: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Road.

RWY 04-22: H3500X75 (ASPH) S-18 MIRL

RWY 04: Tree. RWY 22: Tree.

RWY 16-34: 2400X190 (TURF)

RWY 16: Thld dspcd 595'. Trees. RWY 34: Trees.

AIRPORT REMARKS: Attended irregularly. Deer on and invof arpt. 24 hr self svc fuel with major credit card. Rwy 07-25 plowed winter months. Check arpt manager at 517-617-7145 for conditions. Admin building access-depress V, then simultaneous III-II, then I. Preferred calm wind Rwy 25. ACTIVATE MIRL Rwy 04-22 and Rwy 07-25 and REIL Rwy 25-CTAF. Rwy 16 and dspcd thld marked with 3' yellow cones.

WEATHER DATA SOURCES: AWOS-3 118.125 (517) 279-1810.

COMMUNICATIONS: CTAF/UNICOM 122.7

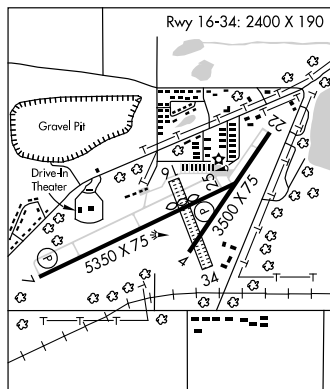
LITCHFIELD RCO 122.1R 111.2T (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75' W84°45.91' 244° 15 NM to fld. 1040/05W.



COLEMAN A. YOUNG MUNI (See DETROIT)

COWLEY FLD (See SANDUSKY)

CROSWELL

ARNOLD FLD (55G) 2 NE UTC-5(-4DT) N43°17.87' W82°36.40'

DETROIT

780 NOTAM FILE LAN

RWY 18-36: 2585X140 (TURF)

RWY 18: Thld dspcd 500'. Trees. RWY 36: Thld dspcd 470'. P-line.

RWY 07-25: 2570X75 (TURF)

RWY 07: Thld dspcd 540'. P-line. RWY 25: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Mar. Winter ops skis only. Rwy 18-36 marked with cones, dspcd thld marked three 12 inch yellow cones each side. Rwy 07 dspcd thld marked with 3' boards, Rwy 07-25 thlds defined by mowing.

COMMUNICATIONS: CTAF/UNICOM 122.8

WAAS CH 56506 W07A	APP CRS 069°	Rwy ldg TDZE Apt Elev	5350 959 959
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 7

COLDWATER / BRANCH COUNTY MEMORIAL (OEB)

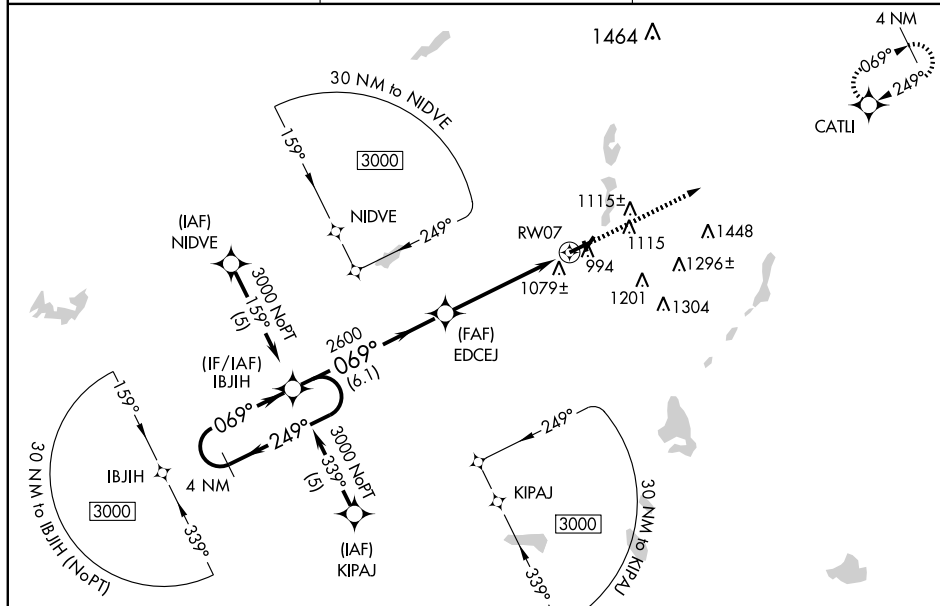
- ▼ When local altimeter setting not received, use Sturgis altimeter setting and increase all DAs 48 feet and LPV visibility $\frac{1}{4}$ mile all Cats and all MDAs 60 feet and LNAV Cat C visibility $\frac{1}{4}$ mile. Baro-VNAV NA when using Sturgis altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 16-34 NA.

MISSED APPROACH:
Climb to 3000 direct
CATLI and hold.

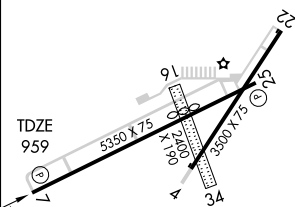
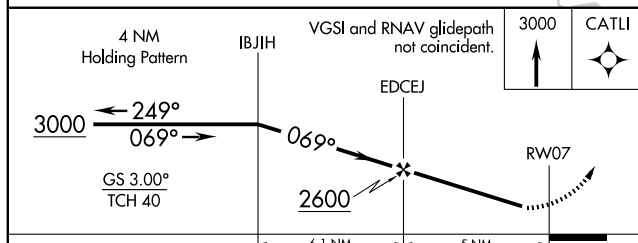
AWOS-3
118.125

KALAMAZOO APP CON ★
121.2 340.9

UNICOM
122.7 (CTAF) 0



ELEV 959



CATEGORY	A	B	C	D
LPV DA	1307-1 $\frac{1}{4}$	348 (400-1 $\frac{1}{4}$)		NA
LNAV/ VNAV DA	1418-1 $\frac{3}{4}$	459 (500-1 $\frac{3}{4}$)		NA
LNAV MDA	1420-1	461 (500-1)	1420-1 $\frac{1}{4}$ 461 (500-1 $\frac{1}{4}$)	NA
CIRCLING	1420-1	461 (500-1)	1480-1 $\frac{1}{2}$ 521 (600-1 $\frac{1}{2}$)	NA

MIRL Rwy 4-22 and 7-25 0
REIL Rwy 25 0

WAAS CH 99606 W25A	APP CRS 249°	Rwy Idg TDZE 959 Apt Elev 959	5350
--	------------------------	---	-------------

RNAV (GPS) RWY 25

COLDWATER/BRANCH COUNTY MEMORIAL (OEB)

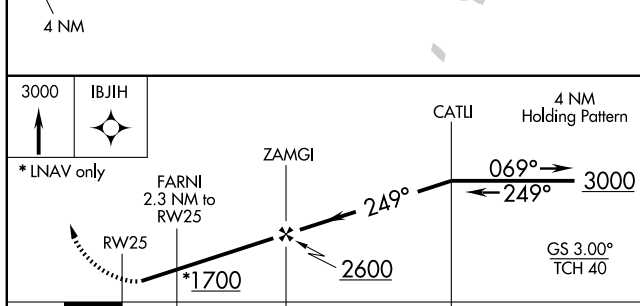
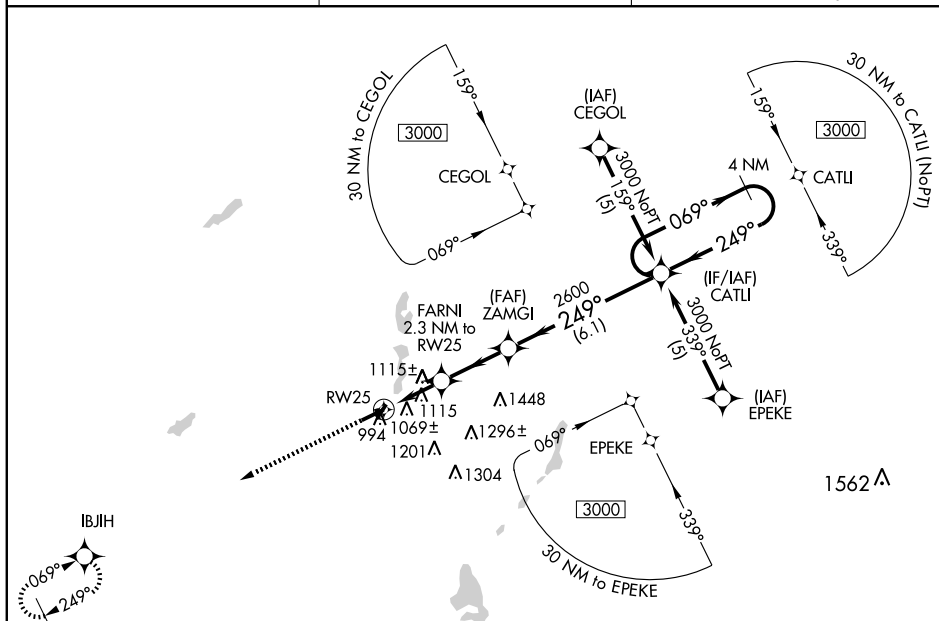
When local altimeter setting not received, use Sturgis altimeter setting and increase all DAs 48 feet and LPV visibility $\frac{1}{4}$ mile all Cats and all MDAs 60 feet and RNAV Cat C visibility $\frac{1}{4}$ mile. Baro-VNAV NA when using Sturgis altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 16-34 NA.

MISSED APPROACH:
Climb to 3000 direct
IBJIH and hold.

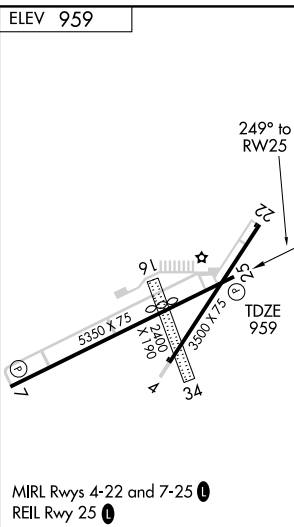
AWOS-3
118.125

KALAMAZOO APP CON ★
121.2 340.9

UNICOM
122.7 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA	1306-1 $\frac{1}{4}$	347 (400-1 $\frac{1}{4}$)		NA
LNAV/VNAV DA	1424-1 $\frac{3}{4}$	465 (500-1 $\frac{3}{4}$)		NA
LNAV MDA	1420-1	461 (500-1)	1420-1 $\frac{1}{4}$ 461 (500-1 $\frac{1}{4}$)	NA
CIRCLING	1420-1	461 (500-1)	1480-1 $\frac{1}{2}$ 521 (600-1 $\frac{1}{2}$)	NA



VOR/DME LFD
111.2
Chan **49**

APP CRS
244°

Rwy Idg **5350**
TDZE **959**
Apt Elev **959**

VOR/DME RWY 25

COLDWATER/ BRANCH COUNTY MEMORIAL (OEB)

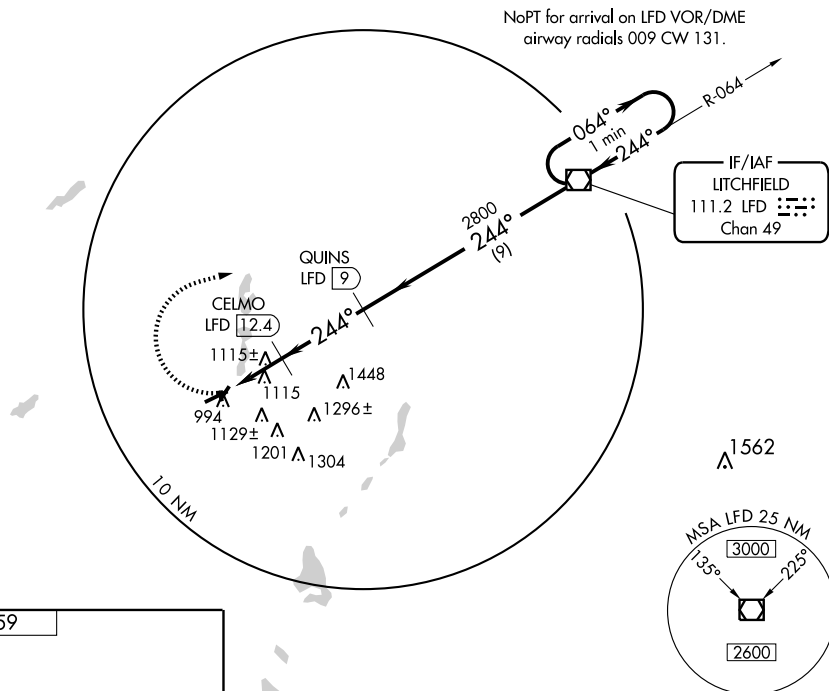
▼ When local altimeter setting not received, use Sturgis altimeter setting and increase all MDAs 60 feet and S-25 Cat C visibility $\frac{1}{4}$ mile.
▲ Circling to Rwy 16-34 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing right turn to 2800 direct LFD VOR/DME and hold.

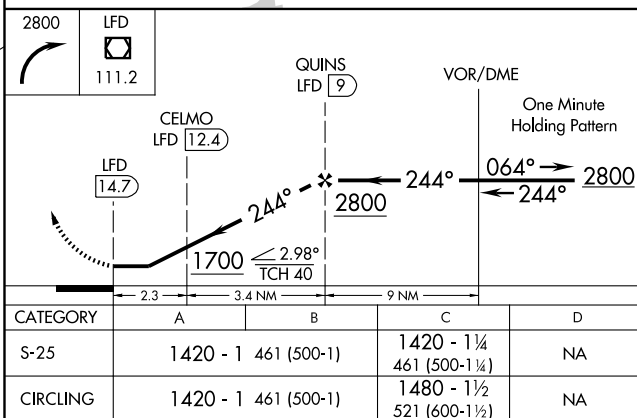
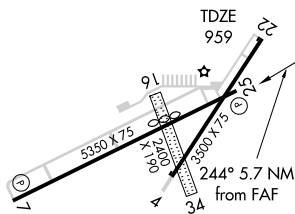
AWOS-3
118.125

KALAMAZOO APP CON ★
121.2 340.9

UNICOM
122.7 (CTAF) 0



ELEV 959



MIRL Rwy 4-22 and 7-25 **0**
REIL Rwy 25 **0**

COLDWATER, MICHIGAN
Orig 10042

COLDWATER/ BRANCH COUNTY MEMORIAL (OEB)
41°56'N - 85°03'W

VOR/DME RWY 25

VOR/DME LFD 111.2 Chan 49	APP CRS 064°	Rwy Idg TDZE Apt Elev 5350 959 959
---	------------------------	--

VOR RWY 7

COLDWATER / BRANCH COUNTY MEMORIAL (OEB)

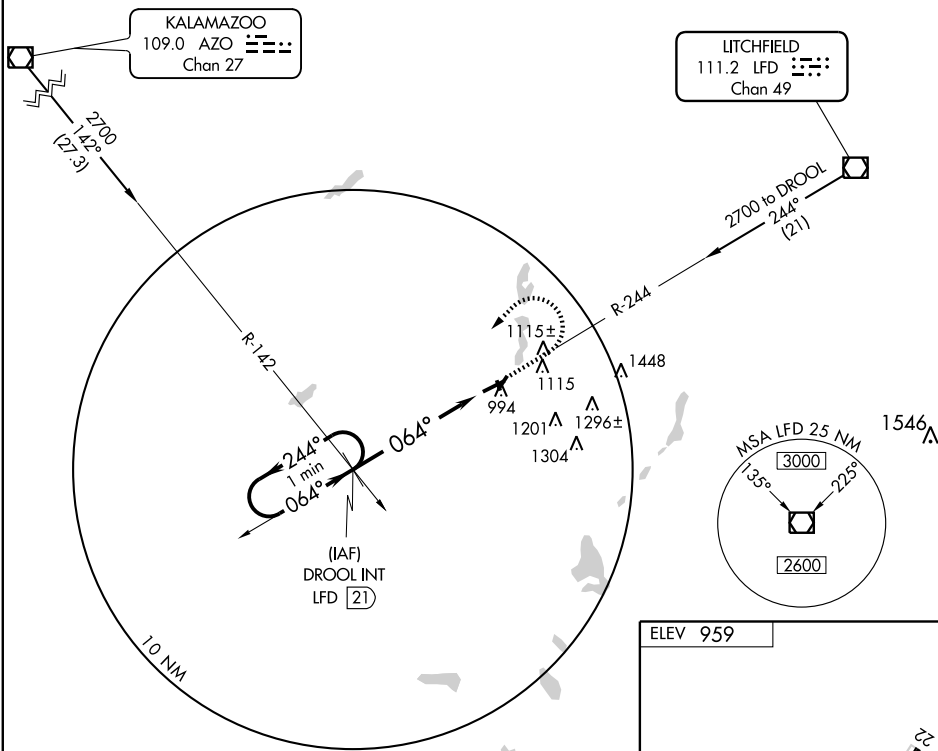
▼ When local altimeter setting not received, use Sturgis altimeter setting and increase all MDAs 60 feet and S-7 Cat C visibility $\frac{1}{4}$ mile.
 ▲ Circling to Rwy 16-34 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 via heading 205° and LFD R-244 to DROOL INT/LFD 21 DME and hold.

AWOS-3
118.125

KALAMAZOO APP CON ★
121.2 340.9

UNICOM
122.7 (CTAF) 0



One Minute
Holding Pattern

DROOL INT
LFD **21**

2000

2700

LFD
R-244
111.2

DROOL INT

2700 ← 244°
064° →

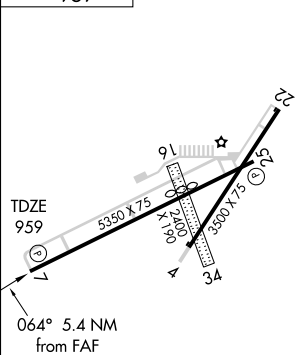
VGSI and descent angles
not coincident.

2.96°
TCH 40

LFD
15.6

5.4 NM

ELEV **959**



MIRL Rwy 4-22 and 7-25 0

REIL Rwy 25 0

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CRYSTAL FALLS

IRON CO (50D) 6 SE UTC-6(-5DT) N46°00.55' W88°16.43'

1340 B NOTAM FILE GRB

RWY 12-30: H3700X50 (ASPH) MIRL (NSTD)

RWY 12: Trees RWY 30: Trees

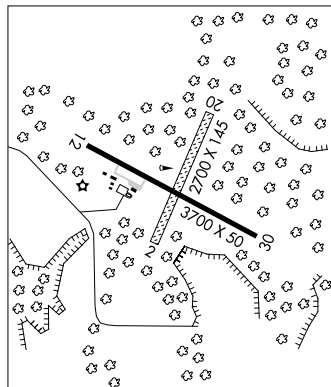
RWY 02-20: 2700X145 (TURF)

RWY 02: Trees RWY 20: Trees

AIRPORT REMARKS: Unattended. No snow removal. Deer on and in/ovf arpt. Rwy 12-30 has crumbled, has numerous cracks and vegetation in pavement. Rwy 12-30 numerous cracks in pavement. Rwy 02-20 MIRL NSTD; 36' from rwy edge. Rwy 02 also 92' tree; 2300' distance; apch ratio 25:1, based on straight out. ACTIVATE NSTD MIRL Rwy 12-30—121.7. Rwy 02-20 marked with 3' yellow cones. Rwy paint markings have failed.

COMMUNICATIONS: CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' 330° 13.8 NM to fld. 1128/2W.

GREEN BAY
L-31A

CUSTER (See MONROE)

DALTON (See FLUSHING)

DAVID'S LANDING (See ST CLAIR)

DAVISON

ATHELONE WILLIAMS MEML (6G0) 1 W UTC-5(-4DT) N43°01.75' W83°31.78'

780 NOTAM FILE LAN

RWY 08-26: H3469X40 (ASPH) MIRL (NSTD)

RWY 08: Thld displcd 170'. P-line.

RWY 26: Thld displcd 368'. P-line.

AIRPORT REMARKS: Unattended. Rwy 08-26 surface cracked, peeling, rough and has loose asphalt. Rwy 08-26-4' drainage ditch 60' left and right of rwy centerline along entire length. Rwy 08-26 NSTD MIRL; lgts located 20' from rwy edge.

COMMUNICATIONS: CTAF 122.9

FLINT RCO 122.3 (LANSING RADIO)

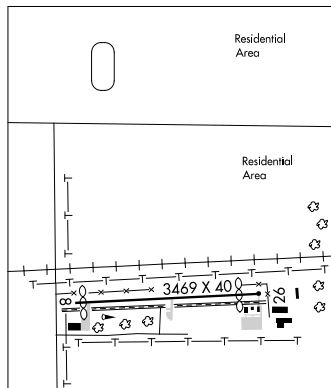
⑤ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 075° 10.3 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage

DETROIT
L-28J
IAP

DECKERVILLE

INDIAN CREEK RANCH (56G) 5 NE UTC-5(-4DT) N43°34.66' W82°38.86'

745 NOTAM FILE LAN

RWY 09-27: 3569X100 (TURF)

RWY 09: Tank. RWY 27: P-line.

RWY 18-36: 2390X100 (TURF)

RWY 18: Trees. RWY 36: Road.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov 1 to Apr 1. Rwy soft in spring. Numerous deer on and in/ovf arpt. Rwy 09-27 and Rwy 18-36 surface rough with irregular mowing. Rwy 09-27 and Rwy 18-36 defined by mowing. Rwy 36 thld marked with 3 cones each side.

COMMUNICATIONS: CTAF 122.9

DETROIT

DELTA CO (See ESCANABA)

APP CRS 092°	Rwy Idg TDZE Apt Elev	3299 780 780
------------------------	-----------------------------	---

RNAV (GPS) RWY 8

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

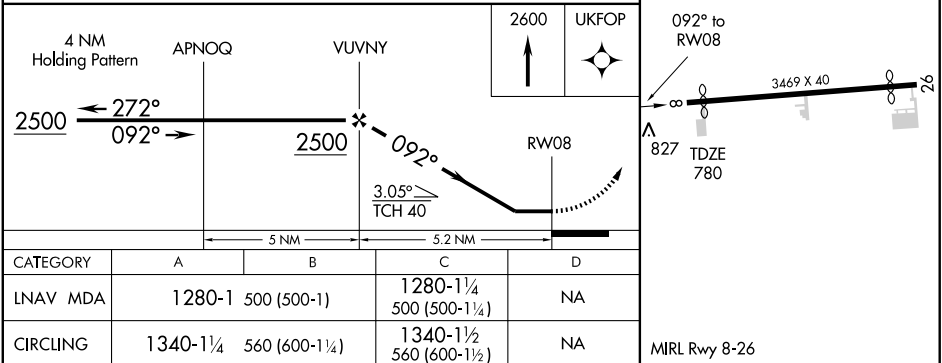
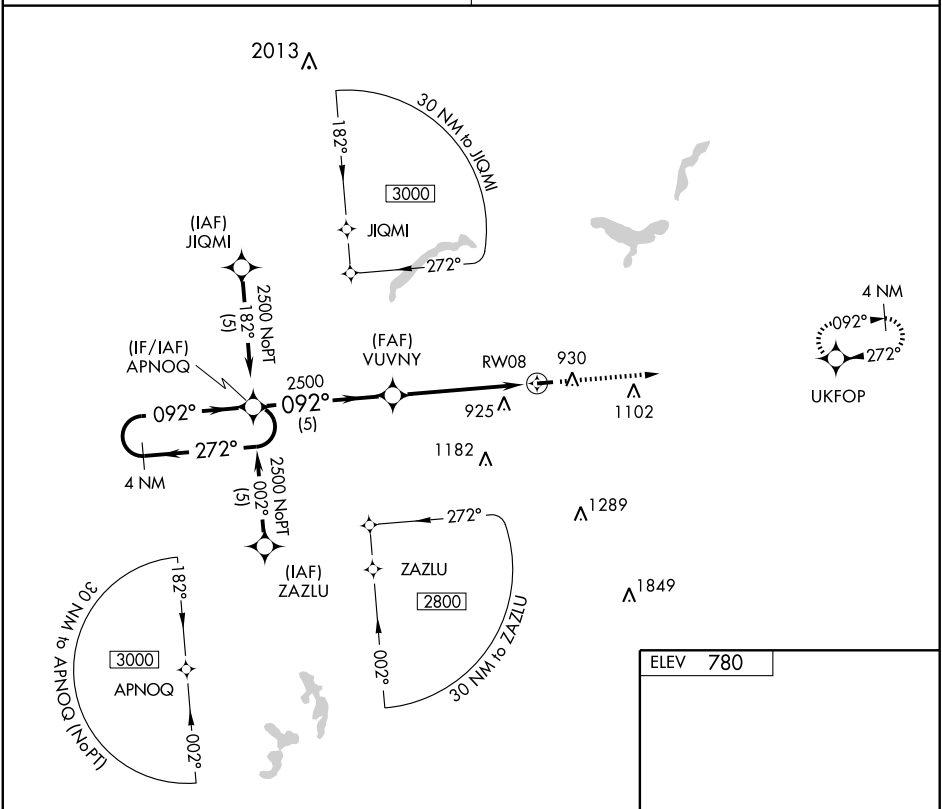


Use Flint altimeter setting.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600
direct UKFOP WP and hold.

FLINT APP CON ★
118.8 257.9

CTAF
122.9



APP CRS	Rwy Idg	3101
272°	TDZE	780
	Apt Elev	780

RNAV (GPS) RWY 26

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)



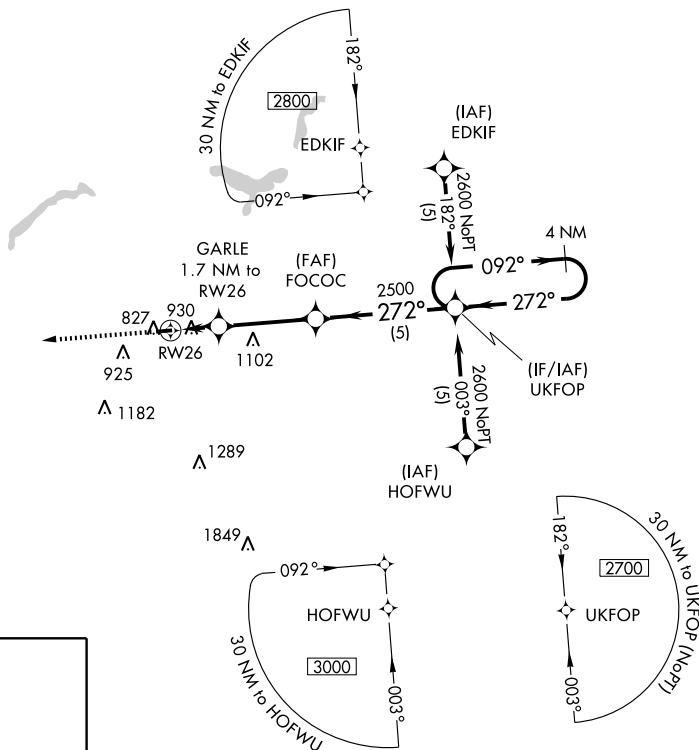
Use Flint altimeter setting.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500
direct APNOQ WP and hold.

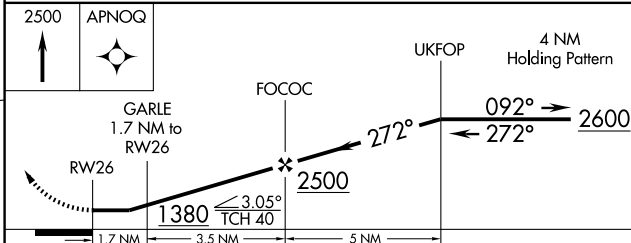
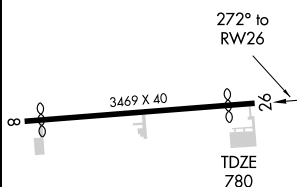
FLINT APP CON ★
118.8 257.9

CTAF
122.9

Λ
2013



ELEV 780



CATEGORY	A	B	C	D
LNAV MDA	1280-1	500 (500-1)	1280-1¼ 500 (500-1¼)	NA
CIRCLING	1340-1¼	560 (600-1¼)	1340-1½ 560 (600-1½)	NA

MIRL Rwy 8-26

DAVISON, MICHIGAN
Orig-A 09295

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

43°02'N - 83°32'W

RNAV (GPS) RWY 26

EC-1, 26 AUG 2010 to 23 SEP 2010

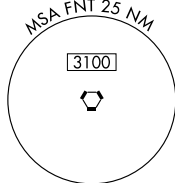
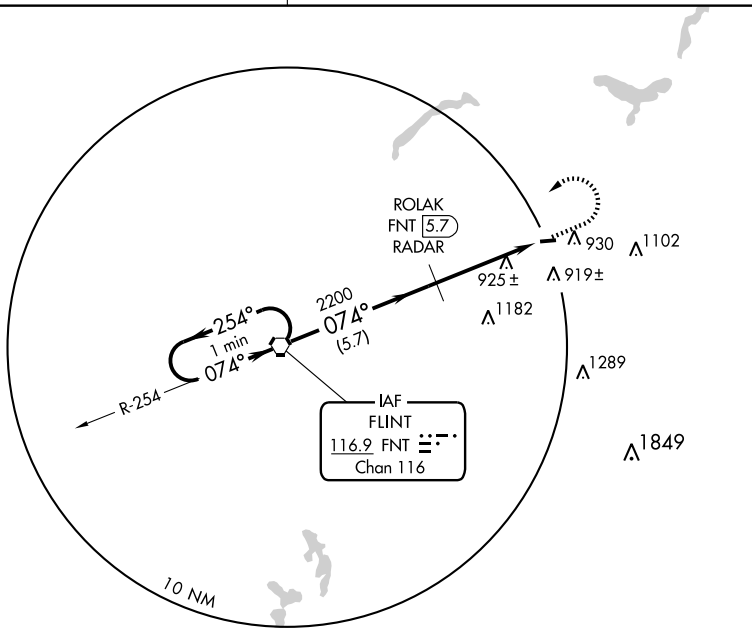
EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC FNT 116.9 Chan 116	APP CRS 074°	Rwy Idg TDZE Apt Elev	3299 780 780
---	------------------------	-----------------------------	---

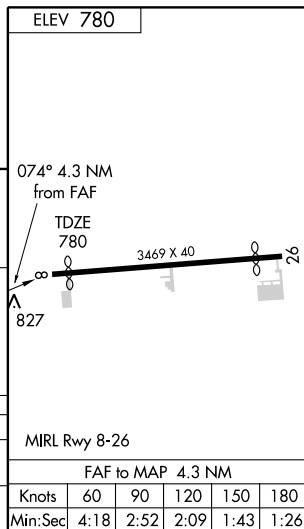
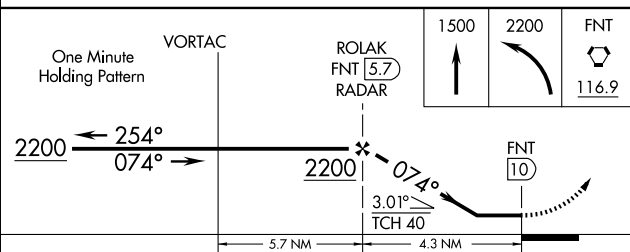
VOR RWY 8

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

<p>▼ ▲ NA</p> <p>Use Flint altimeter setting.</p>	<p>MISSED APPROACH: Climb to 1500, then climbing left turn to 2200 direct FNT VORTAC and hold.</p>
<p>FLINT APP CON ★ 118.8 257.9</p>	<p>CTAF 122.9</p>



DME OR RADAR REQUIRED



CATEGORY	A	B	C	D
S-8	1280-1	500 (500-1)	1280-1 ¼ 500 (500-1 ¼)	NA
CIRCLING	1340-1	560 (600-1)	1340-1 ½ 560 (600-1 ½)	NA

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

10210

AIRPORT DIAGRAM

AL-118 (FAA)

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
DETROIT, MICHIGAN

ATIS
124.875
DETROIT CITY TOWER
121.3 257.8
GND CON
121.85

ELEV
624

42°25.0' N

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0°W

5090 X 100

CAUTION: BE ALERT TO RUNWAY
CROSSING INSTRUCTIONS.
READBACK OF ALL RUNWAY HOLDING
INSTRUCTIONS IS REQUIRED.

42°24.5' N

CONTROL
TOWER
714

U.S. CUSTOMS

AIRLINE
TERMINAL

ELEV 622

LAHSO

33

250.7°

230.7°

715

EXECUTIVE
TERMINAL

4025 X 100

CARGO AREA

RWY 07-25

S-12.5

RWY 15-33

S-75, D-135, 2S-120

FIELD
ELEV
626

42°24.0' N

83°01.0' W

83°00.5' W

83°00.0' W

AIRPORT DIAGRAM

10210

DETROIT, MICHIGAN
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT

COLEMAN A. YOUNG MUNI (DET) 5 NE UTC-5(-4DT) N42°24.55' W83°00.59'

626 B FUEL 100LL, JET A OX 1, 2, 3 AOE NOTAM FILE DET

RWY 15-33: H5090X100 (ASPH - GRVD) S-75, D-135, 2S-120 HIRL

RWY 15: REIL. VASI(V2R)—GA 3.0° TCH 56'. Trees.

RWY 33: REIL. PAPI(P4L)—GA 3.0° TCH 49'. Trees.

RWY 07-25: H4025X100 (ASPH) S-12.5 MIRL

RWY 07: Thld dsplcd 715'. Railroad.

RWY 25: PAPI(P4L)—GA 4.0° TCH 40'. Thld dsplcd 716'. Pole.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 15	07-25	4900

AIRPORT REMARKS: Attended continuously. Birds on and invof arpt.

Unlighted twr 275' AGL 1 mile WSW. Loading/Unloading Class A explosives or poisons not permitted. PPR for Class B and C explosives. Due to noise abatement requirements jets and acft over 12,500 lbs GWT must use Rwy 15-33 except when winds exceed 25 knots, then Rwy 07-25 avbl. Twy D1 clsd indef. Ldg fee for acft 6000 lbs or more. Rwy 33 REIL OTS indef. HIRL Rwy 15-33 step five OTS indef. Rwy 15 VASI OTS indef. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (313) 371-9696.

COMMUNICATIONS: ATIS 124.875 UNICOM 122.95

RCO 122.2 122.55 (LANSING RADIO)

Ⓡ DETROIT APP/DEP CON 126.85

TOWER 121.3 GND CON 121.85

RADIO AIDS TO NAVIGATION: NOTAM FILE YQG.

WINDSOR ONT VOR/DME 113.8 YQG Chan 85 N42°14.99' W82°49.73' 326° 12.5 NM to fld. 620/6W.

MADDS NDB (LOM) 338 DE N40°29.69' W83°05.60' 149°6.3 NM to fld. Unmonitored.

CARGL NDB (MHW/LOM) 230 VQ N42°21.38' W82°57.26' 327° 4 NM to fld. NOTAM FILE DET.

ILS 111.3 I-DET Rwy 15. LOM MADDS NDB.

ILS 111.3 I-VQM Rwy 33. LOM CARGL NDB.

DETROIT

COPTER

H-10G, L-28J, A

IAP, AD



AKRON TWO DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
SL-118 (FAA)

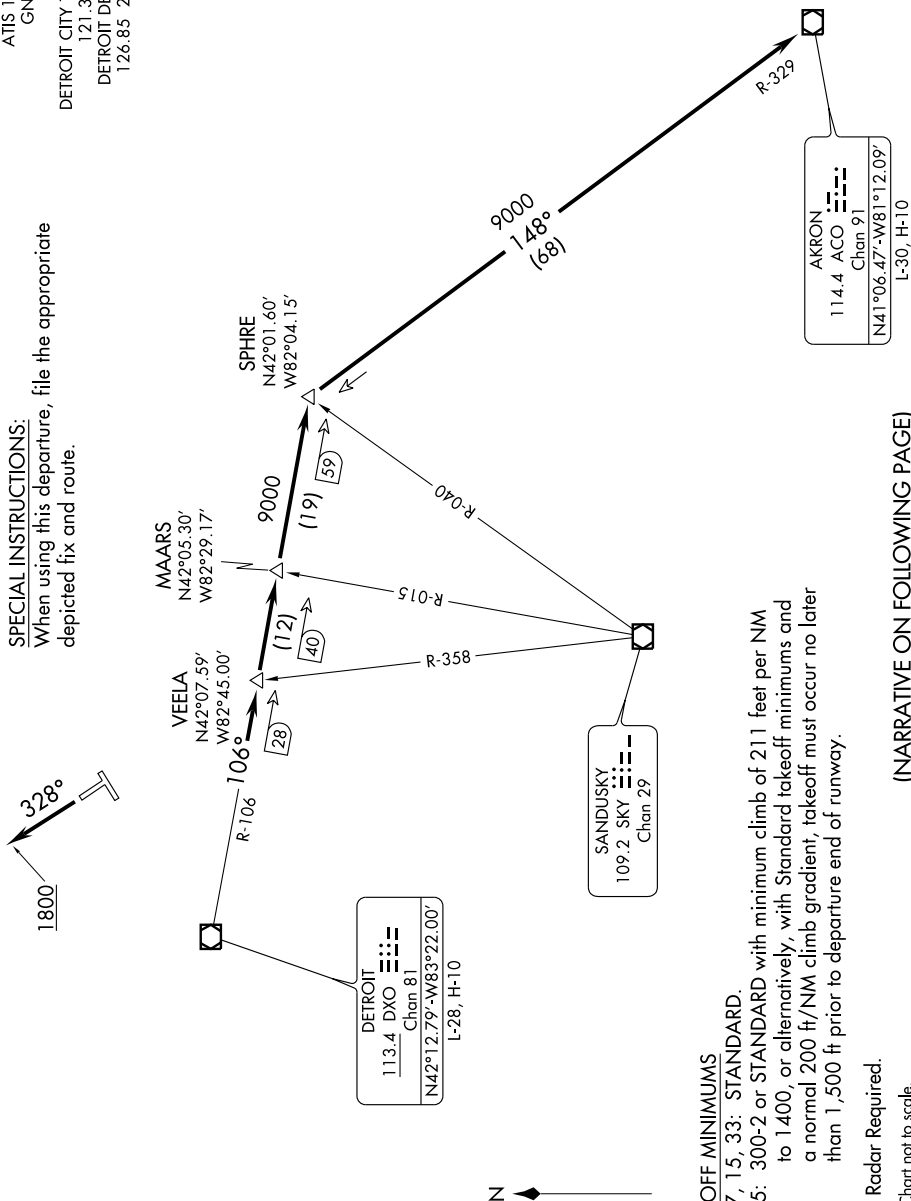
DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.

ATIS 124.875
 GND CON 121.85
 DETROIT CITY TOWER 121.3
 DETROIT DEP CON 126.85
 239.275



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010

AKRON TWO DEPARTURE

(ACO2.ACO) 08101

DETROIT, MICHIGAN

DETROIT/ COLEMAN A. YOUNG MUNI (DET)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb heading 328° to 1800 before turning, expect radar vectors, thence. . . .

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 7: Multiple Trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.

Multiple Trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.

Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.

OL on Stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.

OL on Floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.

Light Standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.

Light Standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.

Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.

OL on Floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.

Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.

OL on Pole 132' from DER, on centerline, 16' AGL/637' MSL.

Rwy 15: Multiple Trees beginning 589' from DER, 221' left of centerline, up to 69' AGL/683' MSL.

Multiple Trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.

Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.

Pipe on Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.

OL on Bldg 1473' from DER, 556' right of centerline, 68' AGL/692' MSL.

Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.

Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.

Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.

Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.

Rod on OL Building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.

Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.

Multiple Trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.

Multiple Trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.

OL on Building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.

Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.

OL on Stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.

Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.

OL Stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.

Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.

Light Standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.

Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.

Rwy 33: Multiple Trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.

Multiple Trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.

Flag Pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

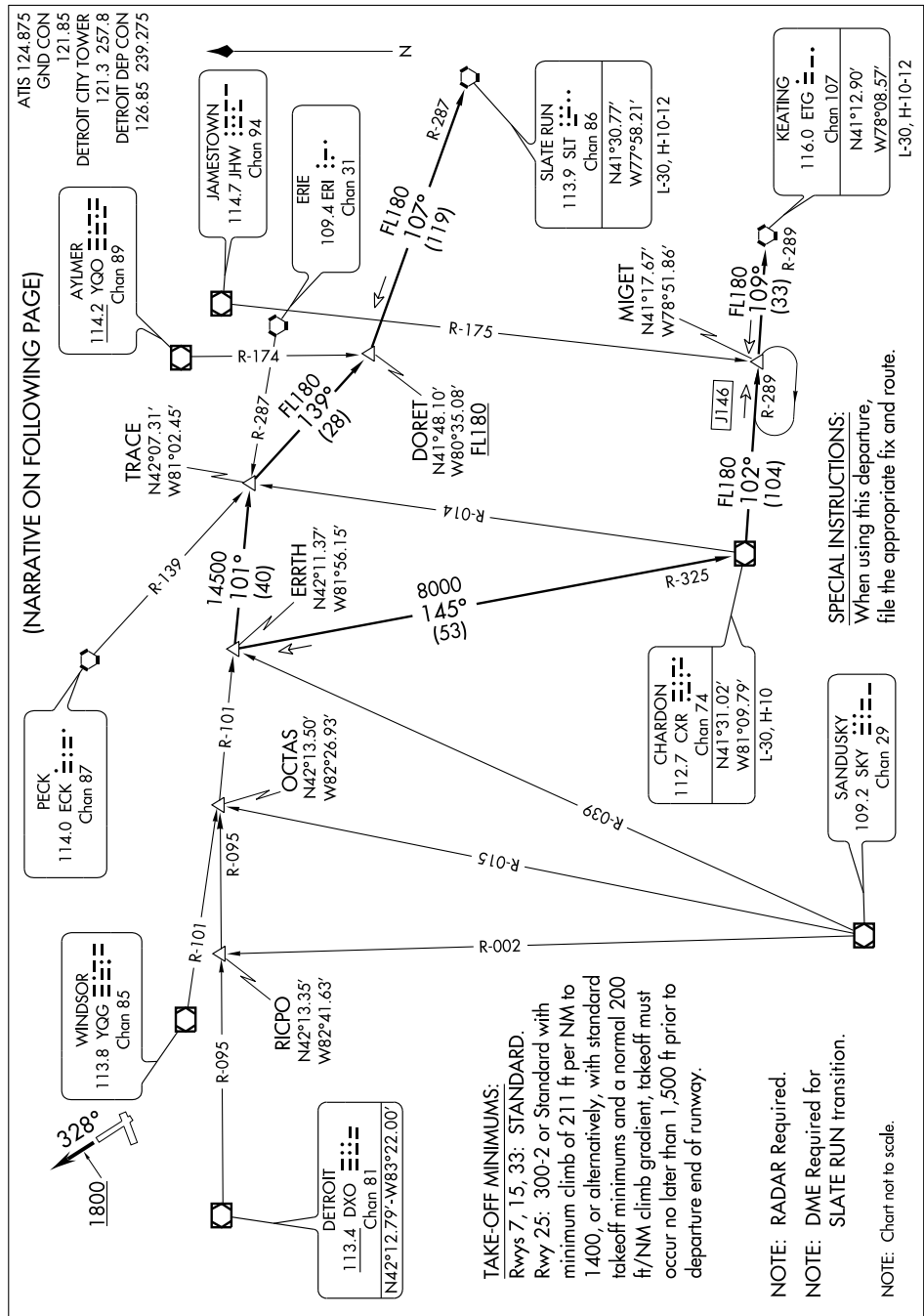
ERRTH TWO DEPARTURE

SL-118 (FAA)

DETROIT /COLEMAN A. YOUNG MUNI (DET)

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



ERRTH TWO DEPARTURE

DETROIT /COLEMAN A. YOUNG MUNI (DET)

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN

DEPARTURE ROUTE DESCRIPTION



TAKE-OFF RWY 33: Climb heading 328° to 1800 expect radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.
Antenna on bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
OL on floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.

Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline, up to 69' AGL/683' MSL.
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
Pipe on OL bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
OL on bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.
Antenna on bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.
Floodlight on bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.

Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.

Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

ERRTH TWO DEPARTURE

DETROIT, MICHIGAN

FORT WAYNE THREE DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
SL-118 (FAA) DETROIT, MICHIGAN

ATIS 124.875
GND CON
121.85
DETROIT CITY TOWER
121.3 257.8
DETROIT DEP CON
126.85 239.275

DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

1800
328°

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 7, 15, 33: STANDARD.

Rwy 25: 300-2 or STANDARD with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 feet prior to departure end of runway.

R-071

FORT WAYNE
117.8 FWA
Chan 125
N40°58.74'-W85°11.28'
L-27, H-5-10

ILLIE
N41°14.91'
W84°07.96'

252°
(51)

217°
(30)

R-318

FINDLAY
108.2 FDY
Chan 19

ANNTS
N41°41.01'
W83°47.44'

R-336

WATERVILLE
113.1 VWV
Chan 78

R-217

217°
(37)

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

FORT WAYNE THREE DEPARTURE

(FWA3.FWA) 08101

DETROIT, MICHIGAN
DETROIT/ COLEMAN A. YOUNG MUNI (DET)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb via heading 328° to 1800 before turning, expect radar vectors, thence. . . .

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
OL on stack on bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.
Antenna on bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
OL on bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

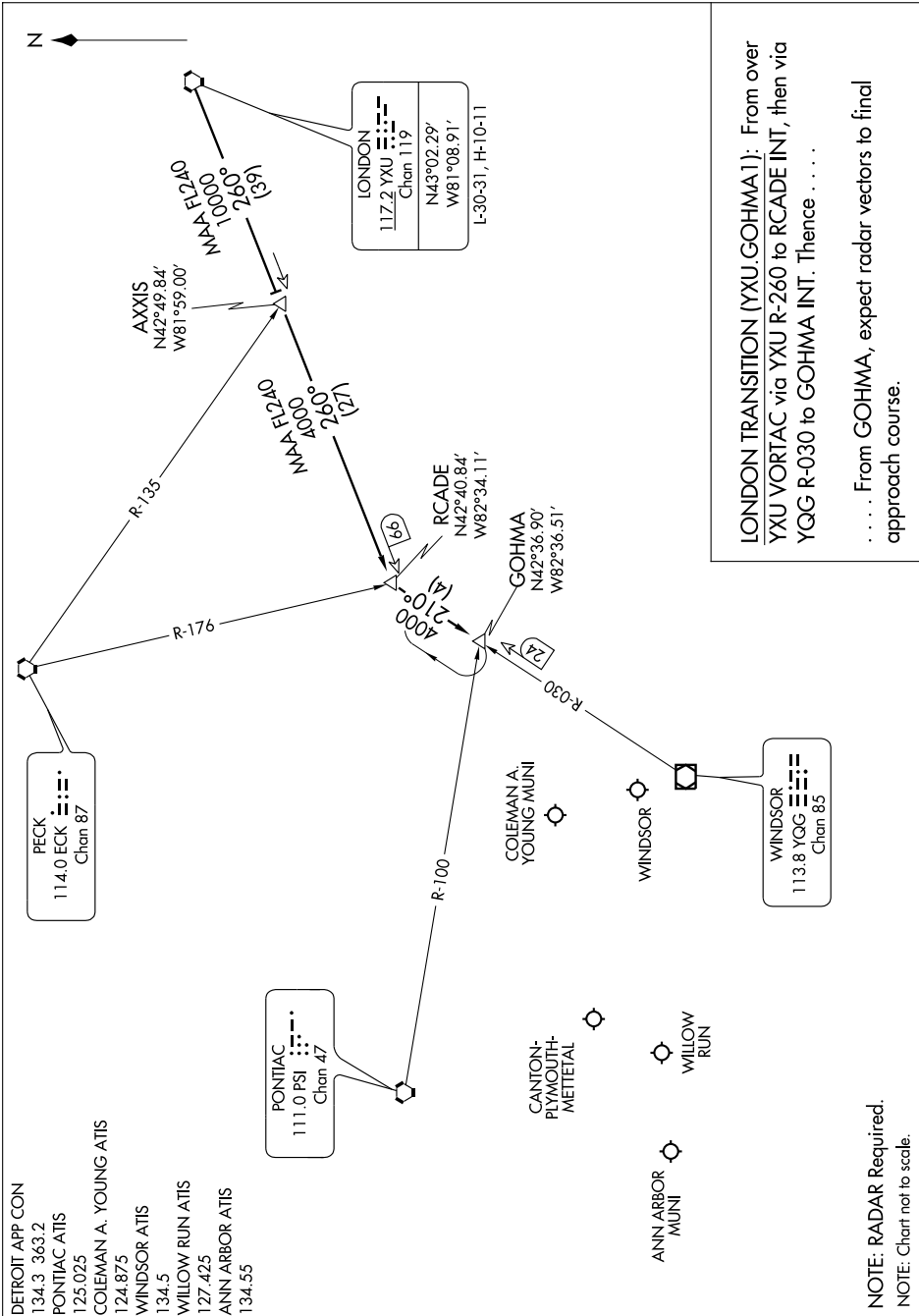
GOHMA ONE ARRIVAL

DETROIT APP CON
134.3 363.2
PONTIAC ATIS
125.025
COLEMAN A. YOUNG ATIS
124.875
WINDSOR ATIS
134.5
WILLOW RUN ATIS
127.425
ANN ARBOR ATIS
134.55

GOHMA ONE ARRIVAL
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN



DETROIT, MICHIGAN

LOC I-VQM 111.3	APP CRS 328°	Rwy Idg TDZE Apt Elev	5090 624 626
---------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 33

DETROIT/COLEMAN A. YOUNG MUNI (DET)

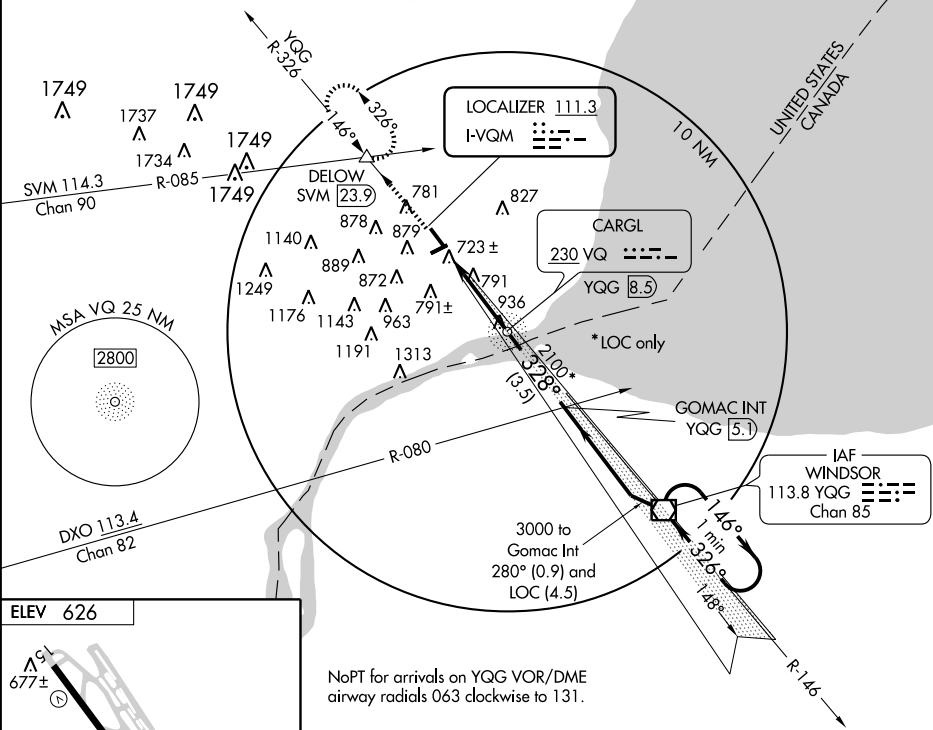


Inoperative table does not apply.

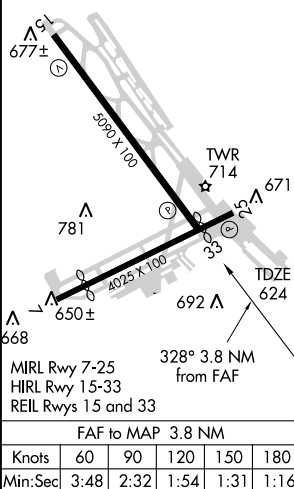
MISSED APPROACH: Climb to 3000 via YQG R-326 to DELOW Int and hold.

ATIS 124.875	DETROIT APP CON 126.85 363.2	DETROIT CITY TOWER 121.3 257.8	GND CON 121.85	UNICOM 122.95
------------------------	--	--	--------------------------	-------------------------

ADF, RADAR, or DME REQUIRED



ELEV 626

NoPT for arrivals on YQG VOR/DME
airway radials 063 clockwise to 131.

	3000	DELOW	GOMAC INT YQG 5.1	VOR/DME	One Minute Holding Pattern
	YQG R-326 113.8	CARGL NDB YQG 8.5	I-VQM 328°	YQG 280°	146° → 3000 ← 326°
		1890	2100*	3000	GS 3.00° TCH 53
			*LOC only		
	3.8 NM	3.5 NM	4.5 NM	0.9	
CATEGORY	A	B	C	D	
S-ILS 33	874-1 250 (300-1)				
S-LOC 33	1120-1 496 (500-1)		1120-1½ 496 (500-1½)	1120-1½ 496 (500-1½)	
CIRCLING	1260-1 634 (700-1)		1260-1¾ 634 (700-1¾)	1260-2 634 (700-2)	

DETROIT, MICHIGAN

Amdt 14A 09295

DETROIT/COLEMAN A. YOUNG MUNI (DET)

42°25'N - 83°01'W

ILS or LOC RWY 33

LOC I-DET 111.3	APP CRS 148°	Rwy Idg TDZE Apt Elev	5090 624 626
---------------------------	------------------------	-----------------------------	---

ILS RWY 15

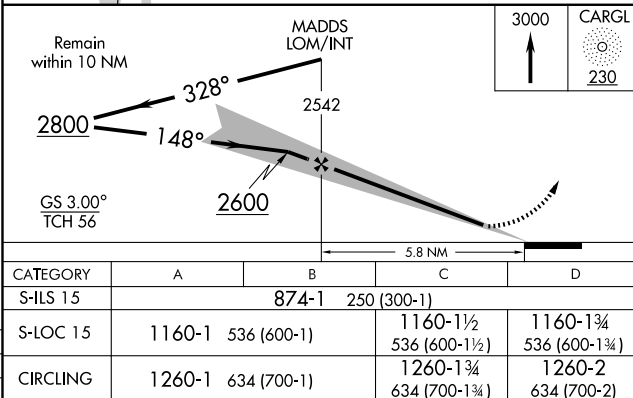
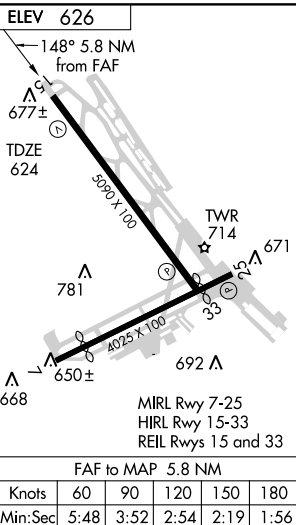
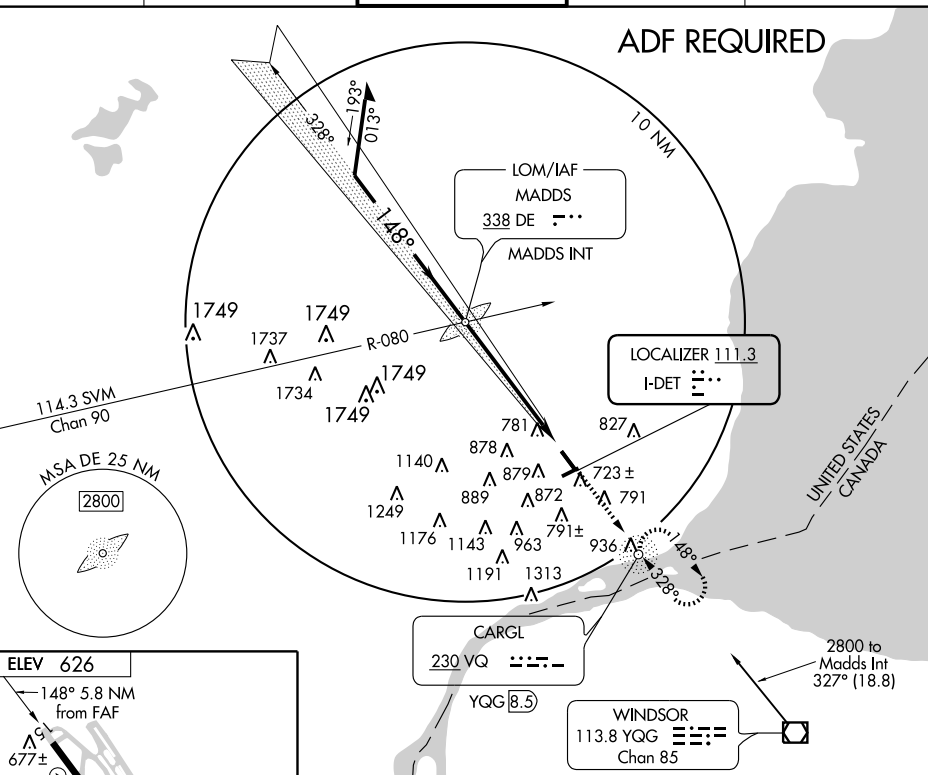
DETROIT/COLEMAN A. YOUNG MUNI (DET)



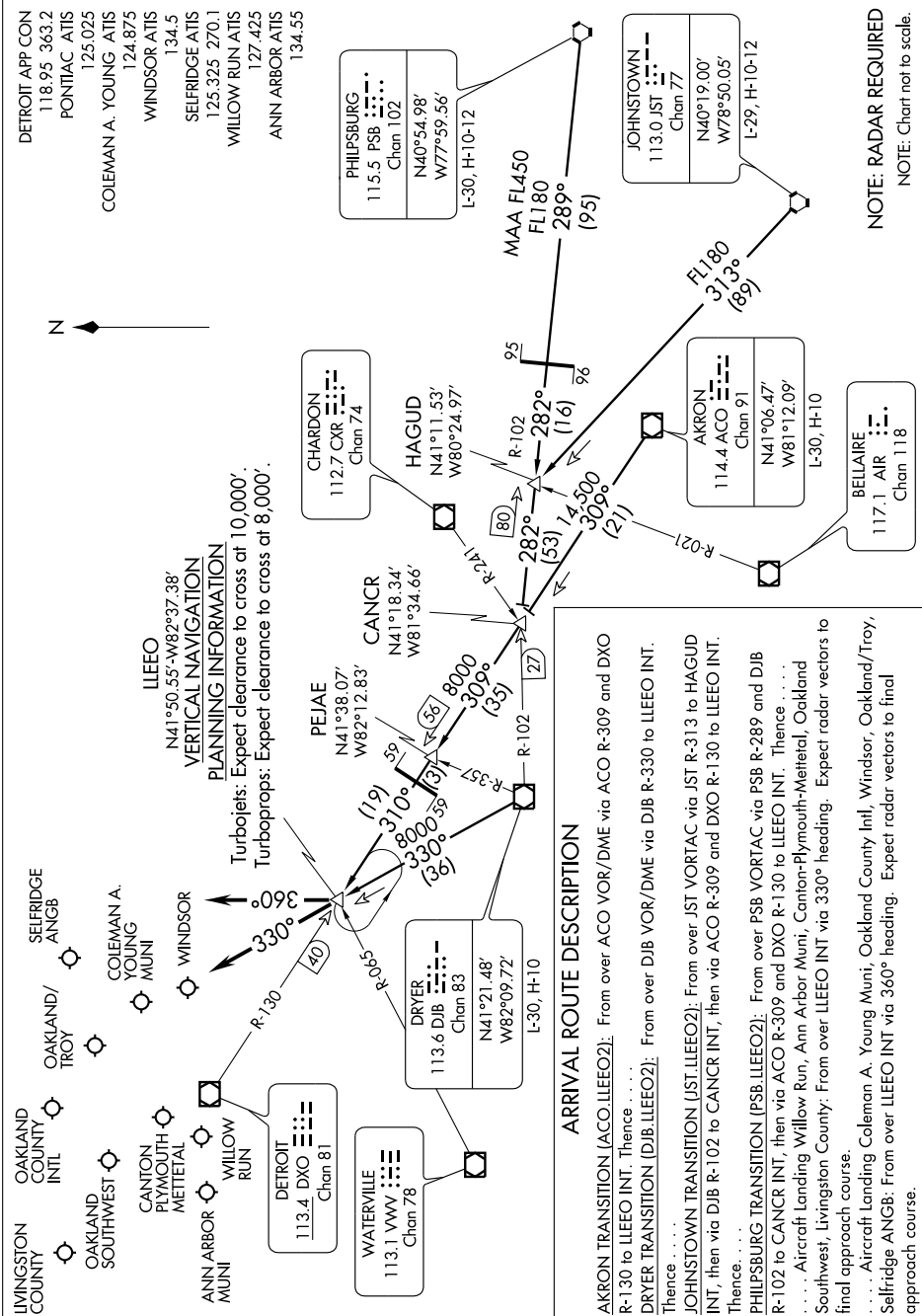
Inoperative table does not apply.
Air carrier landing visibility reduction for local conditions
not authorized.

MISSED APPROACH: Climb to 3000 direct Cargl NDB/YQG 8.5
DME and hold.

ATIS 124.875	DETROIT APP CON 126.85 363.2	DETROIT CITY TOWER 121.3 257.8	GND CON 121.85	UNICOM 122.95
------------------------	--	--	--------------------------	-------------------------



LLEEO TWO ARRIVAL



EC-1, 26 AUG 2010 to 23 SEP 2010

LLEEO TWO ARRIVAL

DETROIT, MICHIGAN

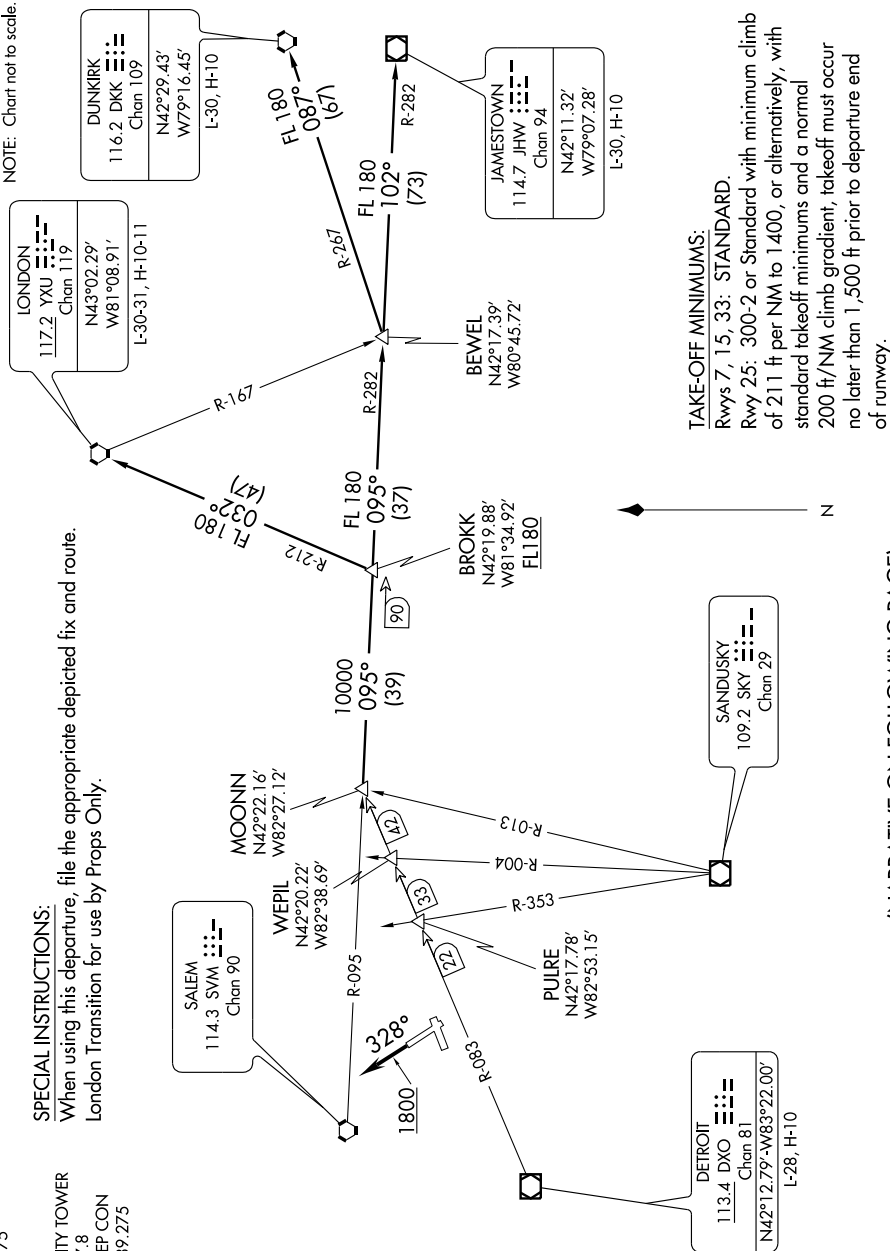
EC-1, 26 AUG 2010 to 23 SEP 2010

ATIS 124.875
GND CON
121.85
DETROIT CITY
121.3 257.8
DETROIT DEP C
126.85 239.2

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.
London Transition for use by Props Only.

NOTE: Chart not to scale.



NOTE: RADAR Required.

(NARRATIVE ON FOLLOWING PAGE)

EC-1. 26 AUG 2010 to 23 SEP 2010

MOONN TWO DEPARTURE

(MOONN2.MOONN) 07354

DETROIT, MICHIGAN

DETROIT /COLEMAN A. YOUNG MUNI (DET)

MOONN TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb heading 328° to 1800' before turning expect radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
Light standard 227' from DER, 105 right of centerline, 33' AGL/654' MSL.
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.
Floodlight on Bldg 1,611' from DER 657' left of centerline, 53' AGL/667' MSL.
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

MOONN TWO DEPARTURE

DETROIT, MICHIGAN

LOM DE	APP CRS	Rwy Idg	5090
338	148°	TDZE	624
		Apt Elev	626

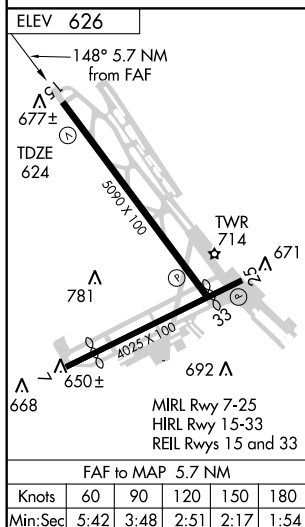
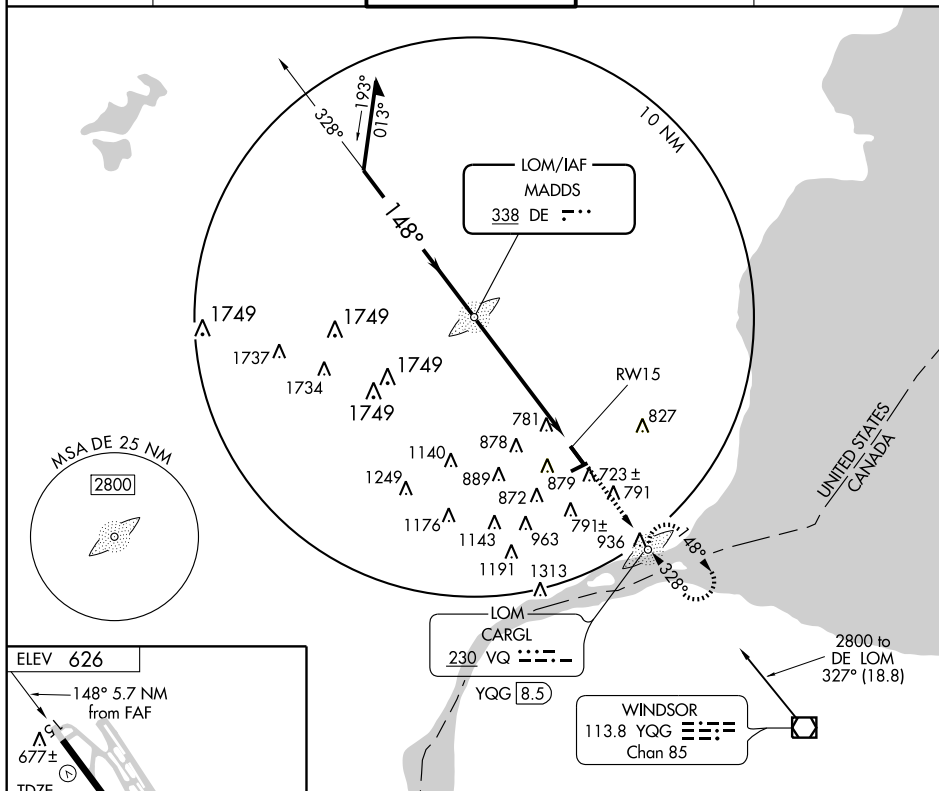
NDB RWY 15

DETROIT/COLEMAN A. YOUNG MUNI (DET)

- ▼ Visibility reduction by helicopters NA.
 ▲ When local altimeter setting not received, use Detroit Metro Wayne County altimeter setting and increase all MDA 60 feet and increase S-15 Cat C and D visibility ¼ mile, and Circling Cat C ¼ mile.

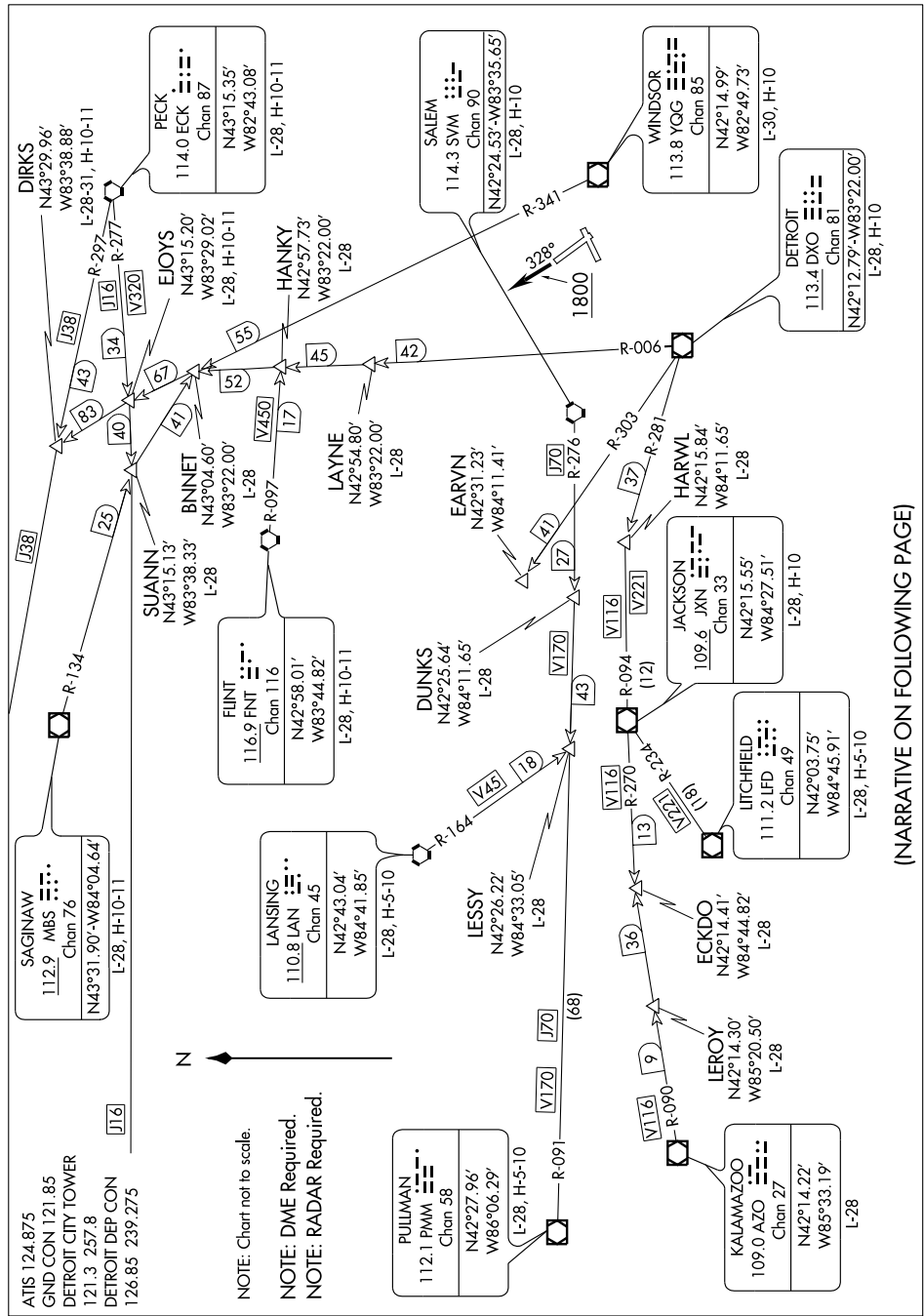
MISSED APPROACH: Climb to 3000 direct VQ LOM/YQG 8.5 DME and hold, continue climb in hold to 3000.

ATIS	DETROIT APP CON	DETROIT CITY TOWER	GND CON	UNICOM
124.875	126.85 363.2	121.3 257.8	121.85	122.95



Remain within 10 NM			
MADDS LOM			
3000 VQ			
2800 328°			
148°			
2600 3.15° TCH 57			
RW15			
5.7 NM			
CATEGORY	A	B	C
S-15	1220-1 596 (600-1)		1220-1½ 596 (600-1½)
CIRCLING	1220-1 594 (600-1)		1220-1½ 594 (600-1½)
			1220-2 594 (600-2)

EC-1, 26 AUG 2010 to 23 SEP 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF MINIMUMS:

Rwy 7, 15, 33: STANDARD.

Rwy 25: 300-2 or STANDARD with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 ft prior to departure end of runway.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft over HARWL must file FL220 and below.

TAKE-OFF RWY 33: Climb heading 328° to 1800 before turning, expect radar vectors to join assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.

OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.

OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.

Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.

Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.

Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.

OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.

Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.

OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.

Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.

Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.

Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.

Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.

OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.

Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.

Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.

Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.

Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.

Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.

Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.

Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.

Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.

OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.

Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.

OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.

Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.

OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.

Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.

Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.

Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.

Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.

Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.

Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

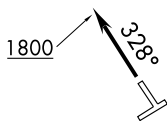
(RID4.RID) 09015

RICHMOND FOUR DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
SL-118 (FAA)

DETROIT, MICHIGAN

ATIS 124.875
GND CON
121.85
DETROIT CITY TOWER
121.3 257.8
DETROIT DEP CON
126.85 239.275



DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

CAVVS
N41°41.04'
W83°34.14'
L-28

SANDUSKY
109.2 SKY
Chan 29

WATERVILLE
113.1 VVV
Chan 78
N41°27.09'
W83°38.32'
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 7, 15, 33: STANDARD.

Rwy 25: 300-2 or Standard with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 ft prior to departure end of runway.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

RICHMOND FOUR DEPARTURE

(RID4.RID) 09015

DETROIT, MICHIGAN
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb via heading 328° to 1800 before turning, expect radar vectors, thence

TAKE OFF ALL OTHER RWYS: Climb via assigned heading for radar vectors thence

....To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VVW R-015 to VVW VOR/DME. Then right turn via VVW R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
OL on Bldg 1473' from DER, 556' right of centerline, 68' AGL/692' MSL.
Tower 3376' from DER, 1118' right of centerline, 103' AGL/723' MSL.
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
Building 3749' from DER, 569' left of centerline, 114' AGL/723' MSL.
Floodlight on Bldg 1611' from DER, 657' left of centerline, 53' AGL/667' MSL.
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2828' from DER, 1225' left of centerline, 141' AGL/770' MSL.
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
Stack 9474 from DER, 2415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

WAAS CH 63211 W15A	APP CRS 148°	Rwy Idg TDZE Apt Elev	5090 624 626
--	------------------------	-----------------------------	---

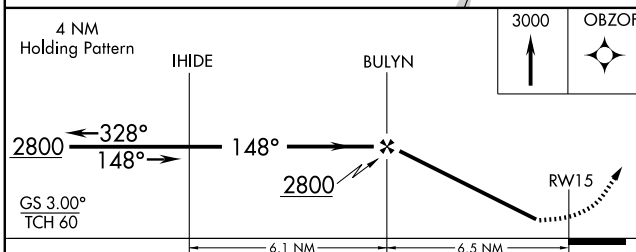
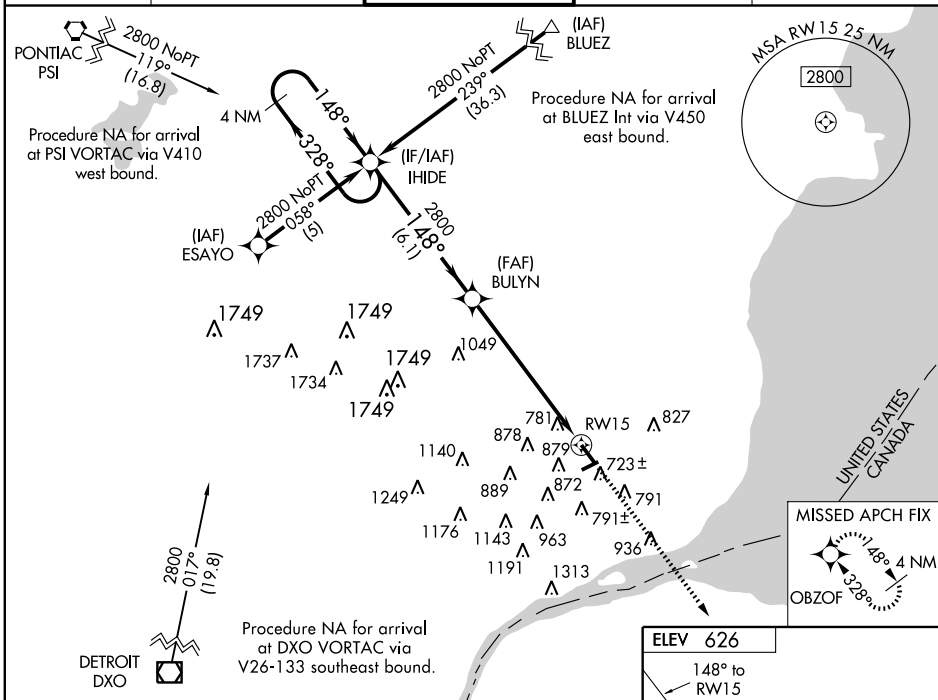
RNAV (GPS) RWY 15

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

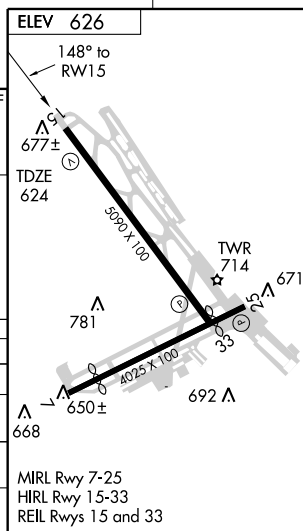
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all DA 48 feet and all MDA 60 feet, increase visibility LPV all Cats, LNAV/VNAV all Cats, and Circling Cat C ¼ mile. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct OBZOF and hold.

ATIS 124.875	DETROIT APP CON 126.85 363.2	DETROIT CITY TOWER 121.3 257.8	GND CON 121.85	UNICOM 122.95
------------------------	--	--	--------------------------	-------------------------



CATEGORY	A	B	C	D
LPV DA		927-1	303 (400-1)	
LNAV/VNAV DA		1079-1½	455 (500-1½)	
LNAV MDA	1180-1	556 (600-1)	1180-1½ 556 (600-1½)	1180-1¾ 556 (600-1¾)
CIRCLING	1180-1	554 (600-1)	1180-1½ 554 (600-1½)	1200-2 574 (600-2)



WAAS CH 58211 W33A	APP CRS 328°	Rwy Idg TDZE Apt Elev	5090 626 626
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 33

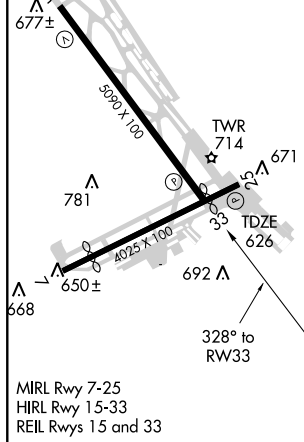
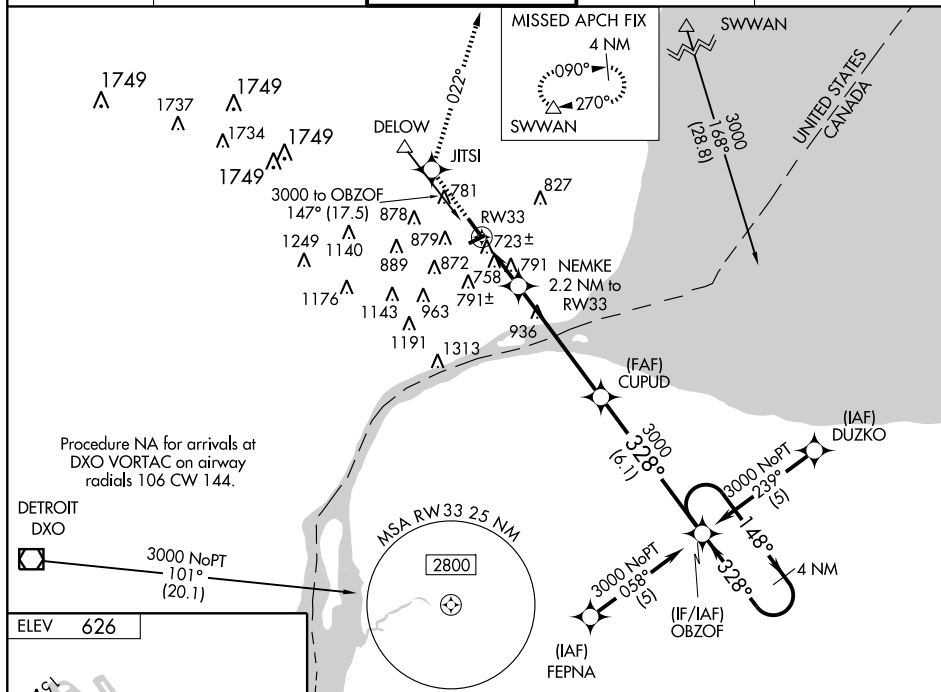
DETROIT/ COLEMAN A. YOUNG MUNI (DET)



For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all DA 48 feet and all MDA 60 feet; increase visibility LPV all Cats, LNAV Cat C and D and Circling Cat C ¼ mile. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4000 direct JITS1 and via 022° track to SWWAN and hold.

ATIS 124.875	DETROIT APP CON 126.85 363.2	DETROIT CITY TOWER 121.3 257.8	GND CON 121.85	UNICOM 122.95
------------------------	--	--	--------------------------	-------------------------



4000	JITS1	TRK 022°	SWWAN	CUPUD	OBZOF	4 NM Holding Pattern
*LNAV only	NEMKE 2.2 NM to RW33	*1380	3000	328°	148°	3000
RW33	2.2 NM	5 NM	6.1 NM			
CATEGORY	A	B	C	D		
LPV DA	936-1 310 (400-1)					
LNAV/VNAV DA	1039-1½ 413 (500-1½)					
LNAV MDA	1100-1 474 (500-1)	1100-1¼ 474 (500-1¼)	1100-1½ 474 (500-1½)	1100-1½ 474 (500-1½)		
CIRCLING	1180-1 554 (600-1)	1180-1½ 554 (600-1½)	1200-2 574 (600-2)			

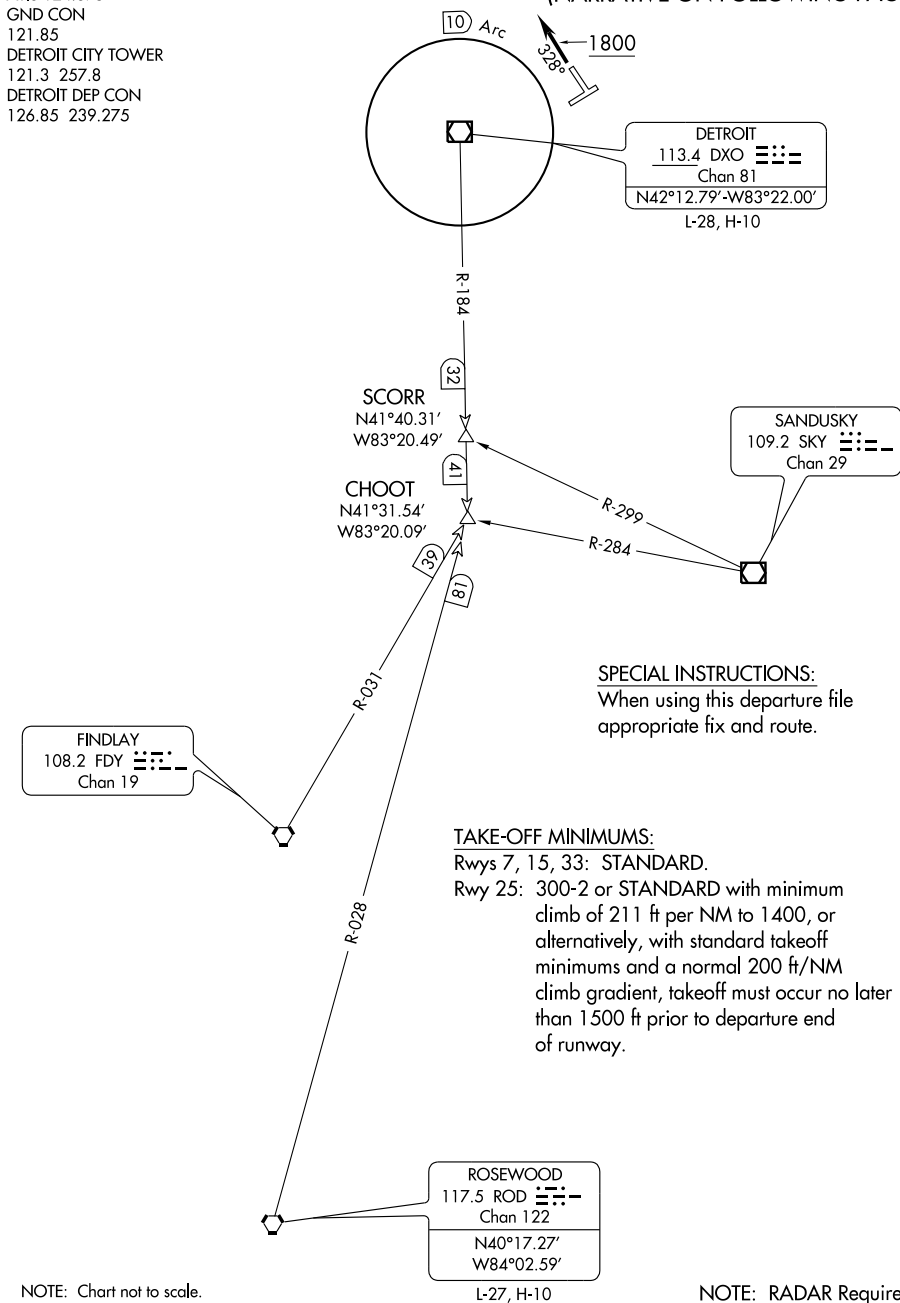
ROSEWOOD TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN

ATIS 124.875
GND CON
121.85
DETROIT CITY TOWER
121.3 257.8
DETROIT DEP CON
126.85 239.275

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 07354

DETROIT, MICHIGAN

DETROIT/COLEMAN A. YOUNG MUNI (DET)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

ROSEWOOD TWO DEPARTURE SL-118 (FAA)

DETROIT, MICHIGAN



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb heading 328 to 1800 before turning expect vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

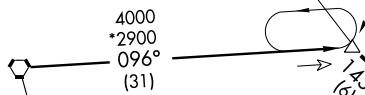
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT
113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFREDGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTETALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

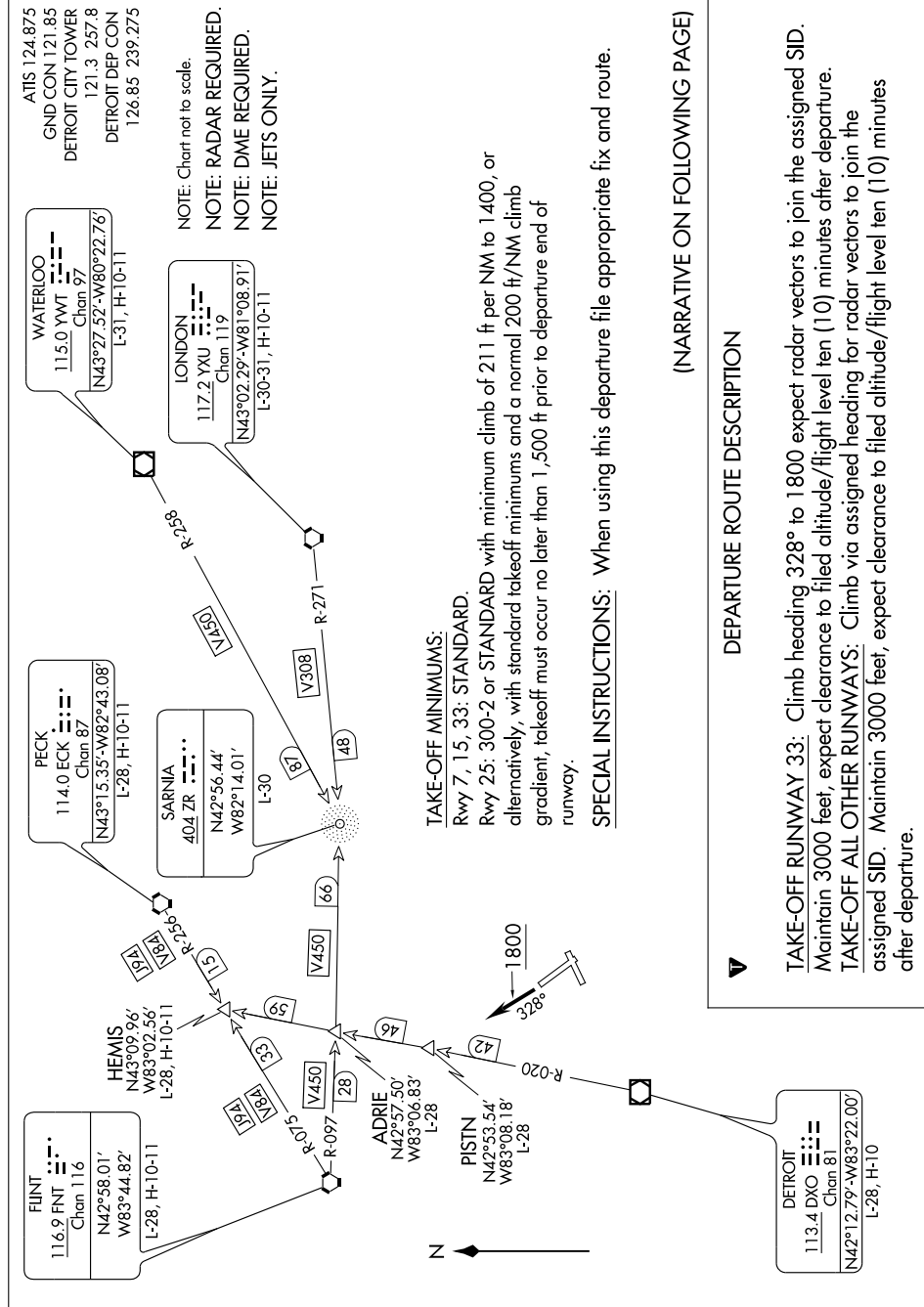
DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

(STCLR3.DXO) 08213
ST. CLAIR THREE DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
SL-118 (FAA) DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



ST. CLAIR THREE DEPARTURE
(STCLR3.DXO) 08213

DETROIT, MICHIGAN
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

EC-1, 26 AUG 2010 to 23 SEP 2010

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple Trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.
 Multiple Trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.
 Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.
 OL on Stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.
 OL on Floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.
 Light Standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.
 Light Standard 227' from DER, 105 right of centerline, 33' AGL/654' MSL.
 Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.
 OL Floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.
 Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.
 OL on Pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple Trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.
 Multiple Trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.
 Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.
 Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.
 OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.
 Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.
 Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.
 Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.
 Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.
 Rod on OL Building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.
 Multiple Trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.
 Multiple Trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.
 OL on Building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.
 Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.
 OL on Stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.
 Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.
 OL Stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.
 Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.
 Light Standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.
 Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple Trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.
 Multiple Trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.
 Flag Pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME YQG 113.8 Chgn 85	APP CRS 326°	Rwy Idg 5090 TDZE 626 Apt Elev 626
---	------------------------	---

VOR RWY 33

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

T Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metro Wayne County altimeter setting and increase all MDA 60 feet and increase Cat C and D visibility $\frac{1}{4}$ mile.

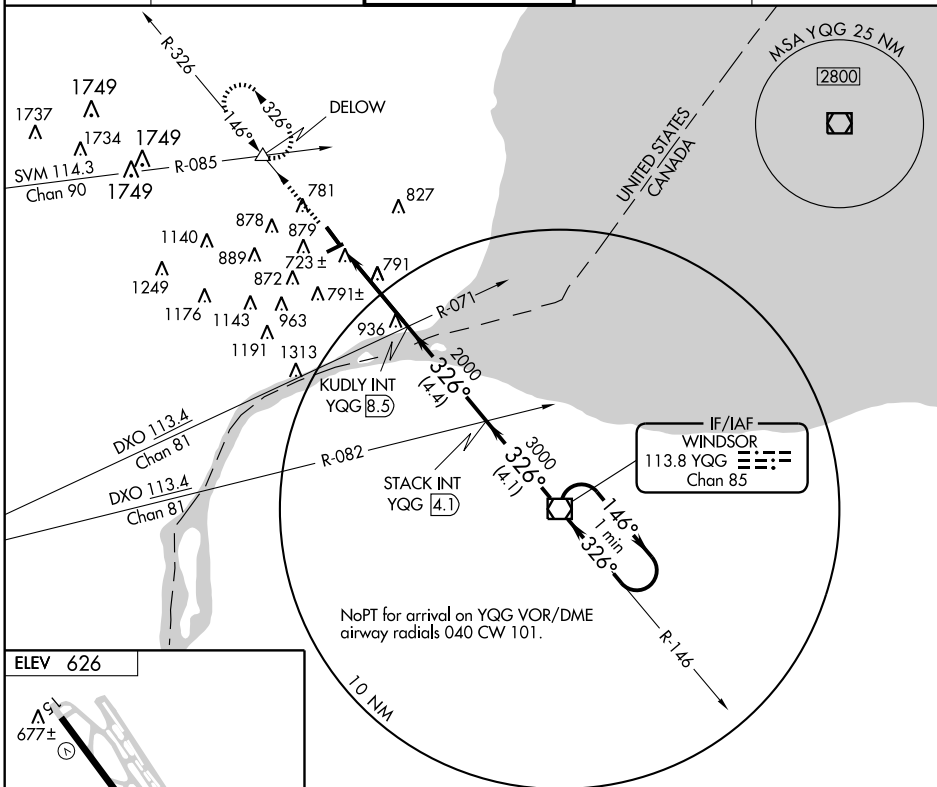
MISSED APPROACH: Climb to 3000 via YQG VOR/DME R-326 to DELOW Int and hold, continue climb-in-hold to 3000.

ATIS
124.875

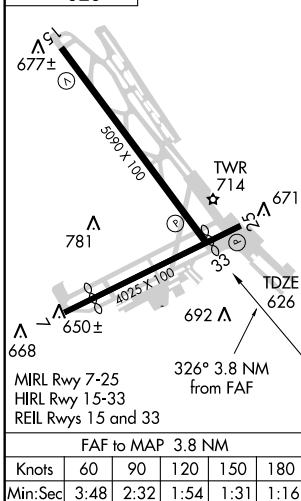
DETROIT APP CON
126.85 363.2

DETROIT CITY TOWER
121.3 257.8

GND CON
121.85

UNICOM
122.95

ELEV 626



CATEGORY	A	B	C	D
S-33	1240-1 614 (700-1)		1240-1 614 (700-1 3/4)	1240-2 614 (700-2)
CIRCLING	1240-1 614 (700-1)		1240-1 614 (700-1 3/4)	1240-2 614 (700-2)

DETROIT, MICHIGAN

Amdt 28 09295

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

42°25'N - 83°01'W

VOR RWY 33

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

AL-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)
DETROIT, MICHIGAN

ATIS
133.675
METRO TOWER
118.4 287.1 RWY 03R-21L
128.125 287.1 RWY 04L-22R
135.0 287.1 RWY 04R-22L
CLNC DEL
120.65

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

RWYS 03L-21R, 04R-22L, 09L-27R, 09R-27L
S-100, D-185, 2S-175, 2D-350
RWYS 03R-21L, 04L-22R
S-100, D-200, 2S-175, 2D-350, 2D/2D2-750

NORTHWEST
GND CON
121.8

U.S. CUSTOMS
ASIG NORTH

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

NORTHEAST
GND CON
119.45

SOUTHWEST
GND CON
132.72

FIELD
ELEV
645

ASDE-X Surveillance System in use.
Pilots should operate transponders
with Mode C on all twys and rwys.

SOUTHEAST
GND CON
119.25

AIRPORT DIAGRAM

DETROIT, MICHIGAN
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT METROPOLITAN WAYNE CO

(DTW) 15 S UTC-5(-4DT) N42°12.75' W83°21.20'

DETROIT

645 B S2 FUEL 100LL, JET A OX 1, 3, 4 AOE Class I, ARFF Index E NOTAM FILE DTW

COPTER

RWY 04R-22L: H12003X200 (CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

H-10G, L-28J, A

RWY 04R: ALSF2. TDZL. Tree. RWY 22L: MALSR. Railroad.

IAP, AD

RWY 03R-21L: H10001X150 (CONC-GRVD) S-100, D-200, 2S-175, 2D-350, 2D/2D2-750 HIRL CL

RWY 03R: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 54'. Trees.

RWY 21L: MALSR. PAPI(P4L)—GA 3.0° TCH 55'. Berm.

RWY 04L-22R: H10000X150 (CONC-GRVD) S-100, D-200, 2S-175, 2D-350, DDT-750 HIRL CL

RWY 04L: ALSF2. TDZ. Pole. RWY 22R: MALSR. Antenna.

RWY 09L-27R: H8708X150 (ASPH-CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL

RWY 09L: REIL. Antenna.

RWY 27R: MALSR. PAPI(P4L)—GA 3.0° TCH 61'.

RWY 03L-21R: H8501X200 (ASPH-CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

RWY 03L: REIL. PAPI(P4R)—GA 3.0° TCH 58'. Pole.

RWY 21R: REIL. PAPI(P4L)—GA 3.0° TCH 59'. Pole.

RWY 09R-27L: H8500X150 (CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

RWY 09R: REIL.

RWY 27L: MALSR. PAPI(P4L)—GA 3.0° TCH 55'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 03L:	TORA-8501	TODA-8501	ASDA-8501	LDA-8501
RWY 03R:	TORA-10001	TODA-10001	ASDA-10001	LDA-10001
RWY 04L:	TORA-10000	TODA-10000	ASDA-10000	LDA-10000
RWY 04R:	TORA-12003	TODA-12003	ASDA-12003	LDA-12003
RWY 09L:	TORA-8708	TODA-8708	ASDA-8618	LDA-8618
RWY 09R:	TORA-8500	TODA-8500	ASDA-8500	LDA-8500
RWY 21L:	TORA-10001	TODA-10001	ASDA-10001	LDA-10001
RWY 21R:	TORA-8501	TODA-8501	ASDA-8501	LDA-8501
RWY 22L:	TORA-12003	TODA-12003	ASDA-12003	LDA-12003
RWY 22R:	TORA-10000	TODA-10000	ASDA-10000	LDA-10000
RWY 27L:	TORA-8500	TODA-8500	ASDA-8500	LDA-8500
RWY 27R:	TORA-8708	TODA-8708	ASDA-8708	LDA-8708

AIRPORT REMARKS: Attended continuously. Be alert birds, waterfowl on and in/ovf arpt. Rwy 21R departures be alert for optical illusion, acft taxiing on Twy T may appear as though crossing Rwy 21R centerline. Rwy 22L departures be alert for optical illusion, acft taxiing on Twy Q may appear as though crossing Rwy 22L centerline. Brightly lgtd parking lot 2.6 NM SW of arpt. ASDE-X surveillance system in use: pilots should operate transponders with mode C on all twys and rwys. Rwy 03R ALSF2 req when RVR/visibility is 6000/1 mile or less. SSALR ops when RVR/visibility is 6000/1 mile. Rwy 03L-21R touchdown and rollout rwy visual range avbl. Rwy 04L-22R touchdown, midfield and rollout rwy visual range avbl. Rwy 09L rwy visual range midfield avbl. Rwy 27L touchdown rwy visual range avbl. Acft on Twy F and Twy V do not block fire station exits. Twy G N of Twy V is a non-movement area. Unidirectional stop bars on Rwy 27R when being used for taxi. Ldg fee. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (734) 941-7848. LLWAS. TDWR.

COMMUNICATIONS: D-ATIS 133.675 734-941-5363 UNICOM 122.95

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

APP CON 125.15 118.575 (EAST) 124.05 (WEST) 124.975 124.25

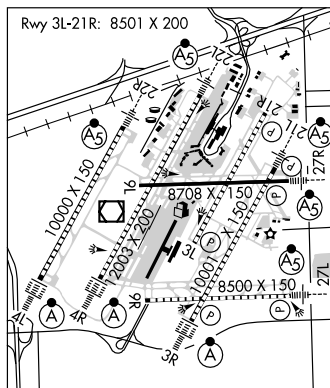
DEP CON 132.025 (TURBOJETS-EAST) 134.3 (TURBOPROPS-EAST) 125.525 (TURBOJETS-WEST) 118.95 (TURBOPROP-WEST) 118.575 (EAST)

METRO TOWER 135.0 (Rwy 04R-22L) 128.125 (Rwy 04L-22R) 118.4 (Rwy 03R-21L)

GND CON 121.8 (NORTHWEST) 132.72 (SOUTHWEST) 119.25 (SOUTHEAST) 119.45 (NORTHEAST)

CLNC DEL 120.65 PRE TAXI CLNC 120.65

AIRSPACE: CLASS B: See VFR Terminal Area Chart.



CONTINUED FROM PRECEDING PAGE

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 028° 10.9 NM to fld.
629/3W. HIWAS.

(H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' at fld. 638/6W. NOTAM FILE DTW.
DME unusable byd 30 NM below 2900'.

REVUP NDB (LOM) 388 DT N42°07.21' W83°25.90' 038° 6.6 NM to fld. Unmonitored. SHUTDOWN.

SPENC NDB (LOM) 223 DM N42°13.20' W83°12.20' 272° 6.7 NM to fld.

ILS/DME 111.95 I-HJT Chan 56Y Rwy 04L. Class IIE. DME also serves Rwy 22R.

ILS/DME 110.7 I-DTW Chan 44 Rwy 04R. LOM REVUP NDB. OM unmonitored. LOM SHUTDOWN.

ILS/DME 110.7 I-DWC Chan 44 Rwy 22L. Class IE.

ILS/DME 111.95 I-JKI Chan 56Y Rwy 22R. Class IE. DME also serves Rwy 04R.

ILS/DME 111.5 I-HUU Chan 52 Rwy 03R.

ILS/DME 111.5 I-EJR Chan 52 Rwy 21L.

ILS 108.5 I-DMI Rwy 27R. LOM SPENC NDB.

ILS 110.15 I-EPA Rwy 27L. Class IE.

COMM/NAV/WEATHER REMARKS: Dual VHF communications required for Simultaneous Close Parallel ILS PRM Approaches. Rwy 04L and Rwy 22R Monitor 127.05, Rwy 04R and Rwy 22L Monitor 135.775 and Rwy 03R and Rwy 21L Monitor 128.35.

WILLOW RUN (YIP) 24 SW UTC-5(-4DT) N42°14.36' W83°31.86'

716 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks NOTAM FILE YIP **DETROIT**

RWY 05R-23L: H7526X150 (ASPH) S-55, D-70, 2S-89, 2D-120 MIRL **COPTER**

RWY 05R: MALSR. Tree.

RWY 23L: MALSR. VASI(V4L)—GA 3.0° TCH 56'.

RWY 09-27: H7294X160 (ASPH-GRVD) S-55, D-70, 2S-89,
2D-120 MIRL

RWY 09: Thld displcd 574'. Railroad.

RWY 14-32: H6312X160 (ASPH-GRVD) S-35, D-45, 2D-90 MIRL

RWY 14: Antenna.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 45'. Thld displcd 525'.
Ground.

RWY 05L-23R: H5995X160 (ASPH-GRVD) S-35, D-45, 2D-90
MIRL

RWY 05L: Trees. RWY 23R: Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05L: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

RWY 23R: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

AIRPORT REMARKS: Attended continuously. Helicopter tkr and ldg on the south ramp prohibited, taxi only. Birds on and in/ovf arpt. Rwy 09-27, only the 80' center portion is grvd. Class IV, ARFF Index A. ARFF Index E svc avbl on req call 734-485-6660. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats requiring Index C or greater call arpt manager 734-485-6670. Flight Notification Service (ADCUS) avbl call 734-942-9000. Customs avbl 24 hrs, Mon-Fri and on call from Detroit Metropolitan Wayne Co arpt on weekend. U.S. customs user fee arpt. All billing thru Wayne Co. Arpt Authority; For customs clearance 1 hr minimum advance notification rqr. Pilots must ctc U.S. customs on 313-226-3140. Req for customs svc by FAA flight plan is not accepted. Ldg fee. Ldg fee is based on acft gross weight.

WEATHER DATA SOURCES: ASOS 132.350 (734) 485-9056. LAWRS.

COMMUNICATIONS: ATIS 127.425 (734) 482-6590

(R) DETROIT APP/DEP CON 118.95

TOWER 125.275 GND CON 121.75

RADIO AIDS TO NAVIGATION: NOTAM FILE DTW.

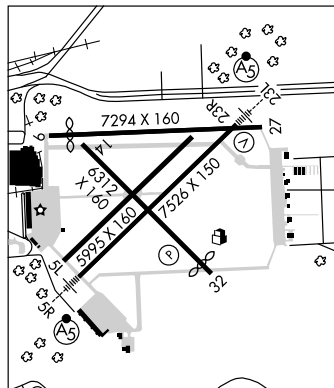
DETROIT (H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' 288° 7.5 NM to fld. 638/6W.

YIPPS NDB (LOM) 359 YI N42°10.45' W83°37.29' 052° 5.6 NM to fld. Unmonitored.

ILS/DME 109.5 I-YIP Chan 32 Rwy 05R. Class IE. LOM YIPPS NDB.

ILS/DME 109.5 I-LSW Chan 32 Rwy 23L. Class IE.

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr.

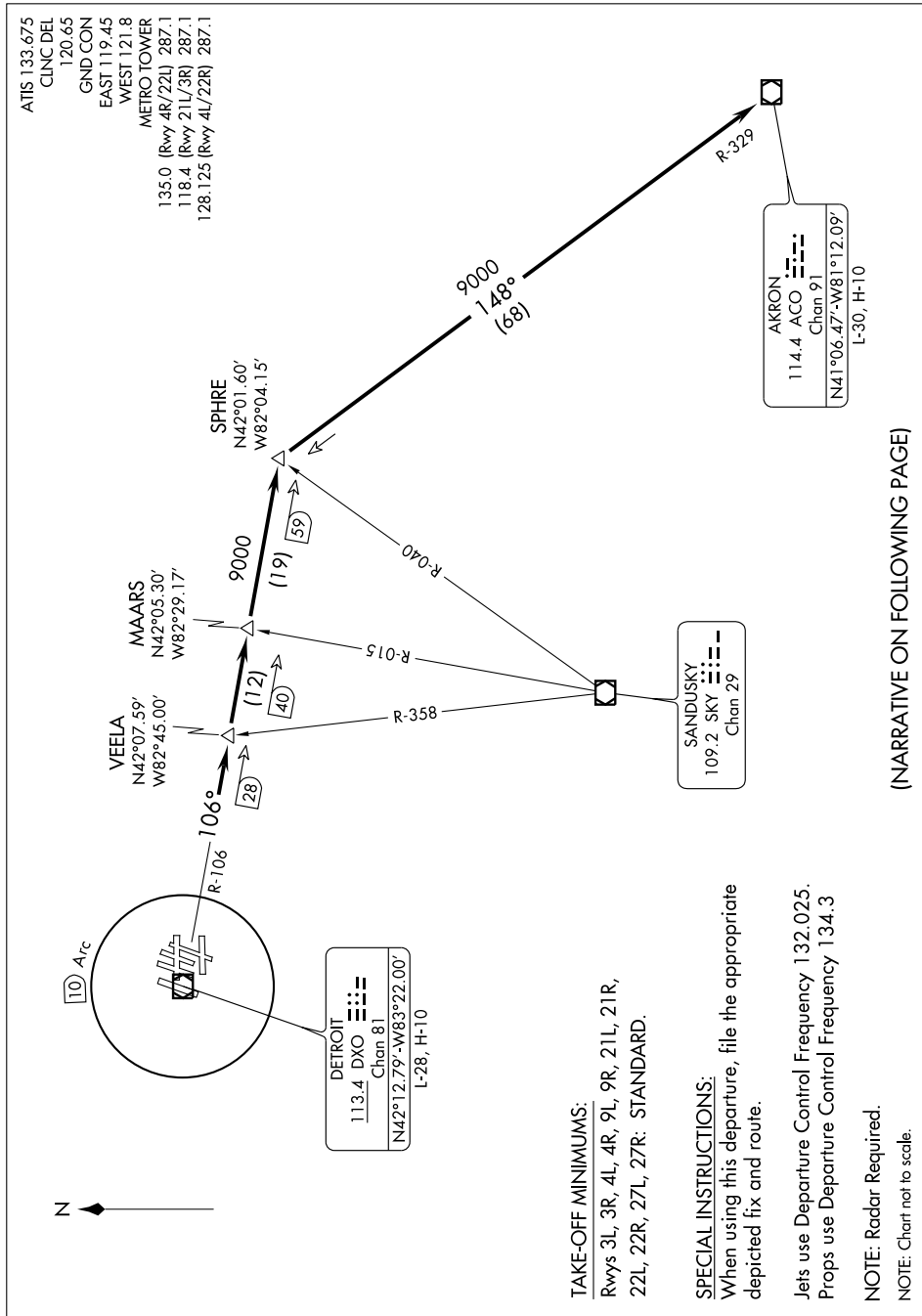


AKRON TWO DEPARTURE

SL-119 (FAA)

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



AKRON TWO DEPARTURE

(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-106, to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Jets maintain 10,000 feet, cross DXO 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple Trnsn Towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.

Multiple Antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on Bldg 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple Trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

Rwy 21L: Multiple Trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple Trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

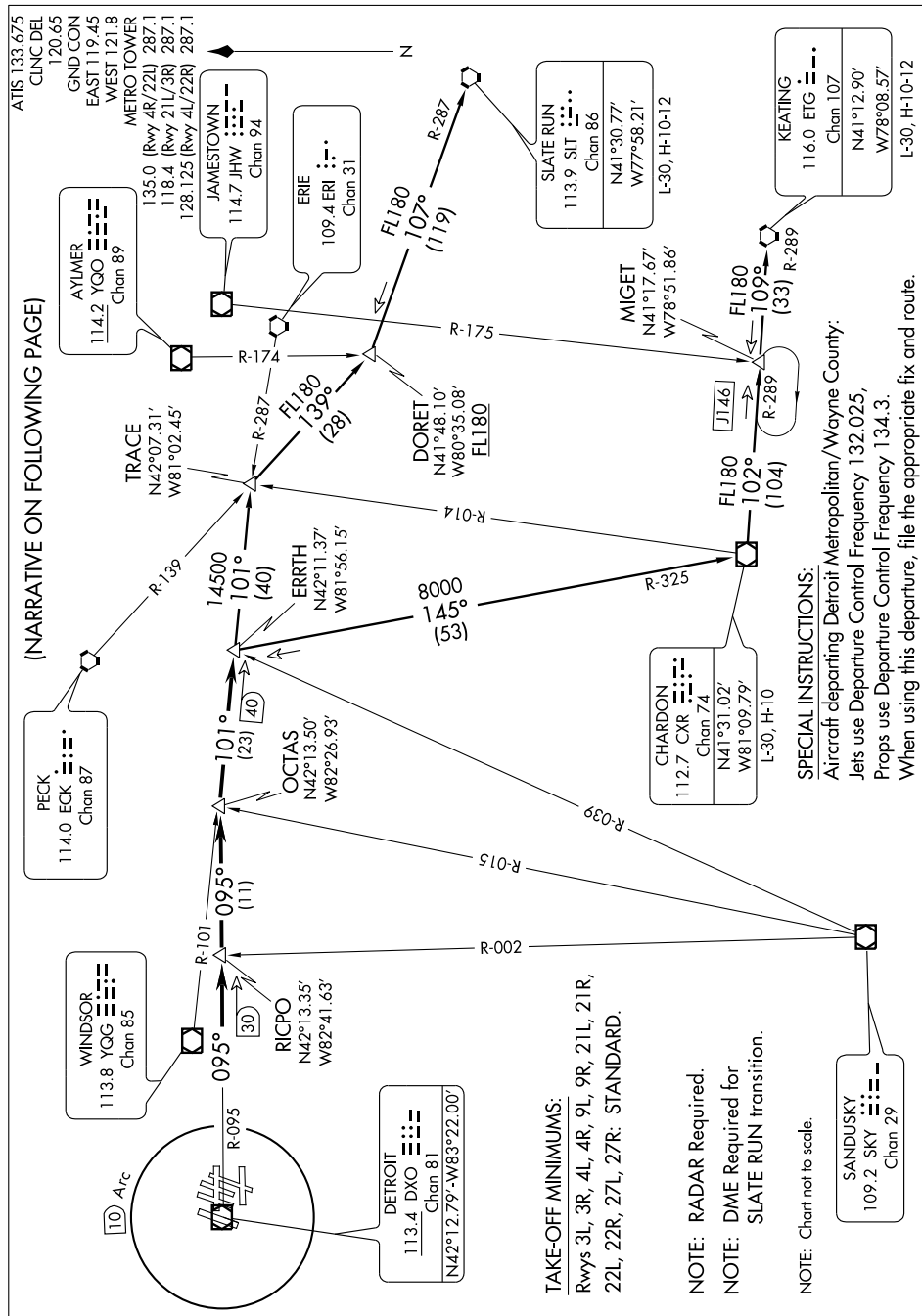
ERRTH TWO DEPARTURE

DETR
SL-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)
(FAA) DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

NOTE: DME Required for
SLATE RUN transition.

TAKE-OFF MINIMUMS:

Rwys 3L, 3R, 4L, 4R, 9L, 9R, 21L, 21R, 22L, 22R, 27L, 27R: STANDARD.

ERRTH TWO DEPARTURE

(ERRTH2.ERRTH) 10210

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

EC-1. 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-095 to OCTAS INT then via YQG R-101 to ERRTH, then via (transition). Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.


TAKE-OFF OBSTACLES

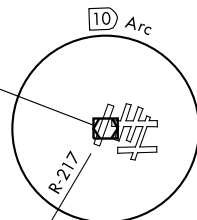
- Rwy 3R: Headwall 399’ from DER, 566’ right of centerline, 17’ AGL/647’ MSL.
- Rwy 4L: Multiple transmission towers 1516’ from DER, 827’ left of centerline, up to 60’ AGL/690’ MSL.
Multiple antennas 2751’ from DER, 762’ right of centerline, up to 84’ AGL/714’ MSL.
- Rwy 4R: Antenna on building 3348’ from DER, 1301’ left of centerline, 100’ AGL/736’ MSL.
- Rwy 9L: Multiple trees 968’ to 2519’ from DER, 462’ left of centerline and 1173’ right of centerline, up to 85’ AGL/715’ MSL.
- Rwy 9R: Tree 1837’ from DER, 947’ right of centerline, 50’ AGL/686’ MSL.
- Rwy 21L: Multiple trees 1079’ to 3910’ from DER, 586’ left of centerline and 1188’ right of centerline, up to 100’ AGL/733’ MSL.
- Rwy 22L: Multiple trees 794’ to 3694’ from DER, 611’ right of centerline and 1381’ left of centerline, up to 110’ AGL/740’ MSL.
- Rwy 27R: Rod on ASR, 4461’ from DER, 464’ left of centerline, 106’ AGL/756’ MSL.

FORT WAYNE THREE DEPARTURE

DETROIT METROPOLITAN WAYNE COUNTY (DTW)
SL-119 (FAA) DETROIT, MICHIGAN

ATIS 133.675
CLNC DEL
120.65
GND CON
EAST 119.45
WEST 121.8
METRO TOWER
135.0 (Rwy 4R/22L) 287.1
118.4 (Rwy 21L/3R) 287.1
128.125 (Rwy 4L/22R) 287.1

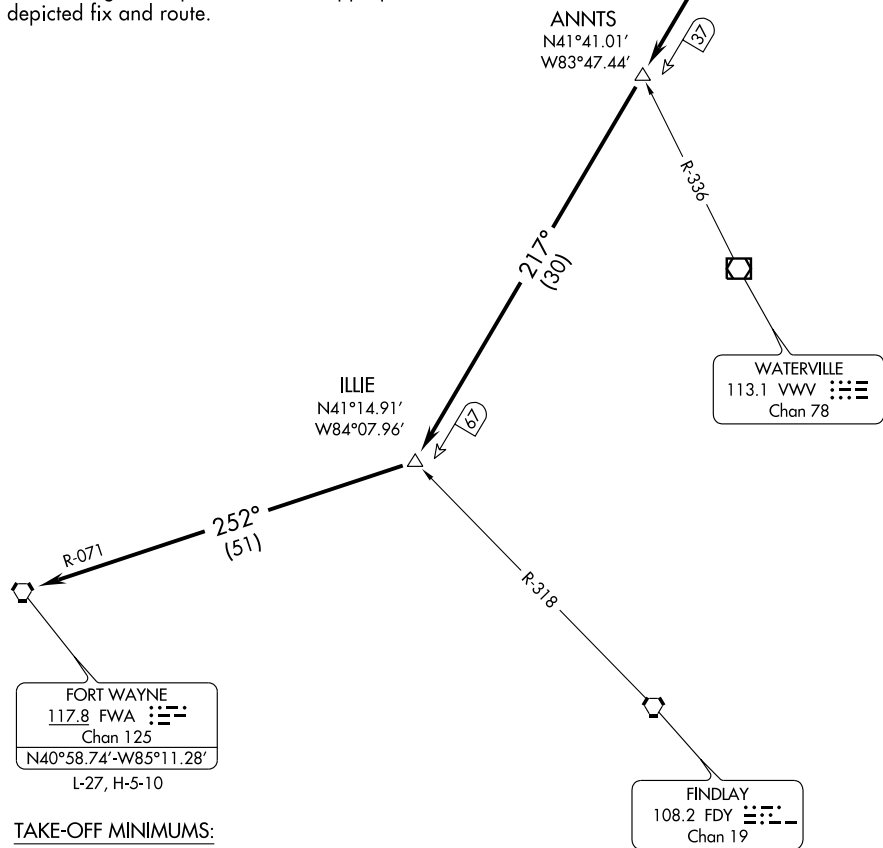
DETROIT
113.4 DXO 
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

Use Departure Control Frequency 125.525.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 3L, 3R, 4L, 4R, 9L, 9R,
21L, 21R, 22L, 22R, 27L, 27R: STANDARD.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

FORT WAYNE THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple Trnsn towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline to 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

(DJB.GEMNI2) 08325

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.GEMNI2): From over BKW VORTAC via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

MONTEBELLO TRANSITION (MOL.GEMNI2): From over MOL VOR/DME via MOL R-288 to BIGAL INT, then via HVQ R-104 to TARCI INT, then via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

SINDE TRANSITION (SINDE.GEMNI2): From over SINDE INT via AML R-281 to GEFFS INT, then via ROD R-121 to VLADY INT, then via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

. . . . From over DJB VOR/DME via R-314 to GEMNI INT/36 DME, then via DXO VOR/DME R-144, to GLOZE INT/8 DME. Expect radar vectors to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg TDZE Apt Elev	10001 633 645
---	------------------------	-----------------------------	--

ILS or LOC RWY 3R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

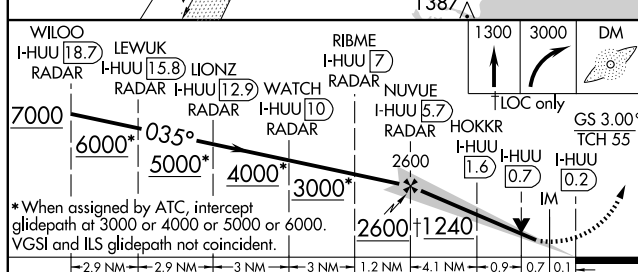
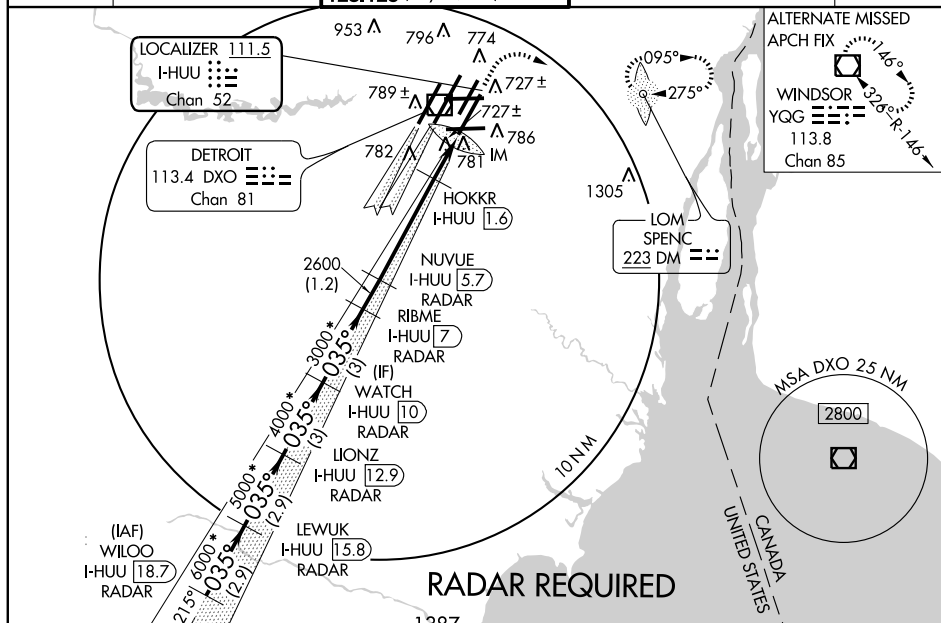
Simultaneous approach authorized with Rwy 4R or Rwy 4L.
ADF and DME or Radar Required.

ALSF-2

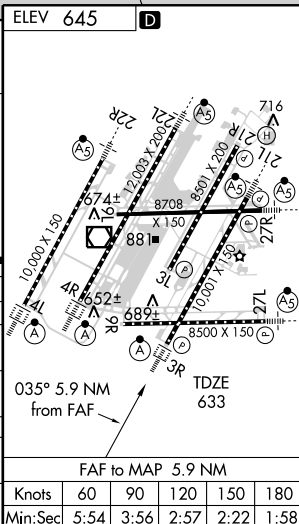


MISSED APPROACH: Climb to
1300 then climbing right turn to
3000 direct SPENC LOM and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------



CATEGORY	A	B	C	D
S-ILS 3R	833/18 200 (200-½)			
S-LOC 3R	1240/24	607 (600-½)	1240/60 607 (600-¾)	1240-1½ 607 (600-½)
CIRCLING	1240-1	595 (600-1)	1240-1¾ 595 (600-¾)	1240-2 595 (600-2)
HOKKR FIX MINIMUMS				
S-LOC 3R	980/24	347 (400-½)	980/40 347 (400-¾)	
CIRCLING	1200-1	555 (600-1)	1200-1½ 555 (600-½)	1200-2 555 (600-2)

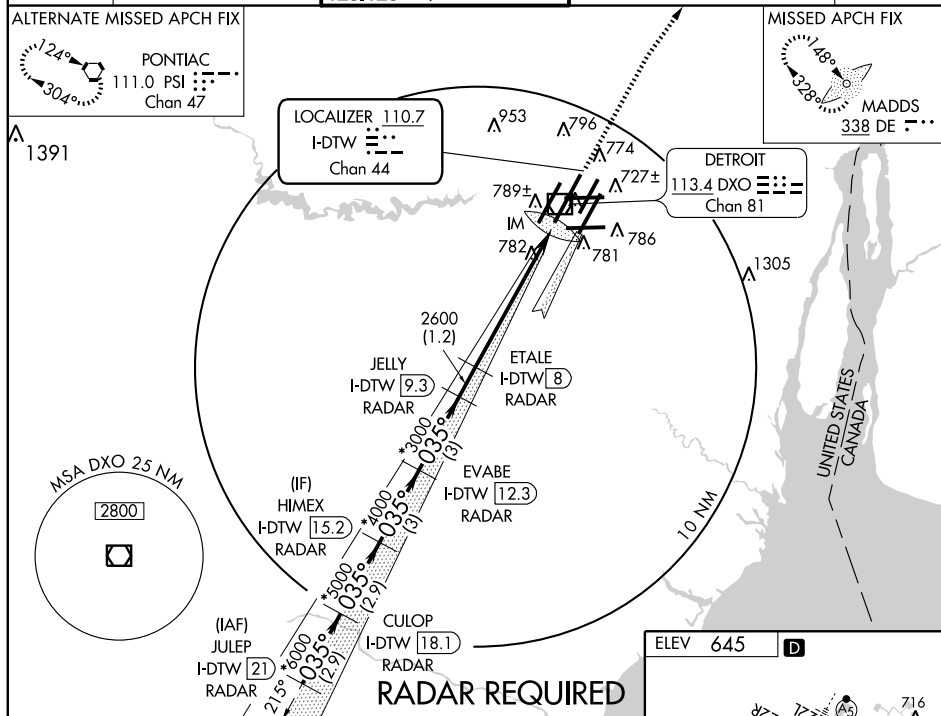


LOC/DME I-DTW 110.7 Chan 44	APP CRS 035°	Rwy Idg TDZE Apt Elev	12003 638 645
---	------------------------	-----------------------------	--

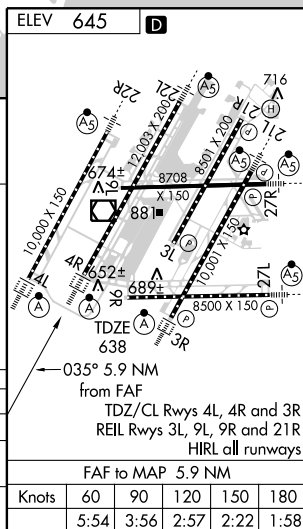
ILS or LOC RWY 4R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous approach authorized with ILS Rwy 3R. ADF and DME or Radar Required.		ALSF-2 	MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.	
ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65



JULEP I-DTW [21] RADAR CULOP I-DTW [18.1] RADAR HIMEX I-DTW [15.2] RADAR EVABE I-DTW [12.3] RADAR JELLY I-DTW [9.3] RADAR ETALE I-DTW [8] RADAR		3000 		DE
7000 GS 3.00° TCH 54		6000 5000 4000 3000 2600		IM
*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.		2.9 NM 2.9 NM 3 NM 3 NM 1.2 NM 0.9 NM 0.2		
CATEGORY	A	B	C	D
S-ILS 4R	838/18 200 (200-½)			
S-LOC 4R	1040/24 402 (400-½)		1040/40 402 (400-¾)	
CIRCLING	1200-1 555 (600-1)		1200-1½ 555 (600-1½)	
			1200-2 555 (600-2)	



ILS or LOC RWY 21L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

LOC/DME I-EJR 111.5 Chan 52	APP CRS 215°	Rwy Idg TDZE Apt Elev	10001 632 645
---	------------------------	-----------------------------	--

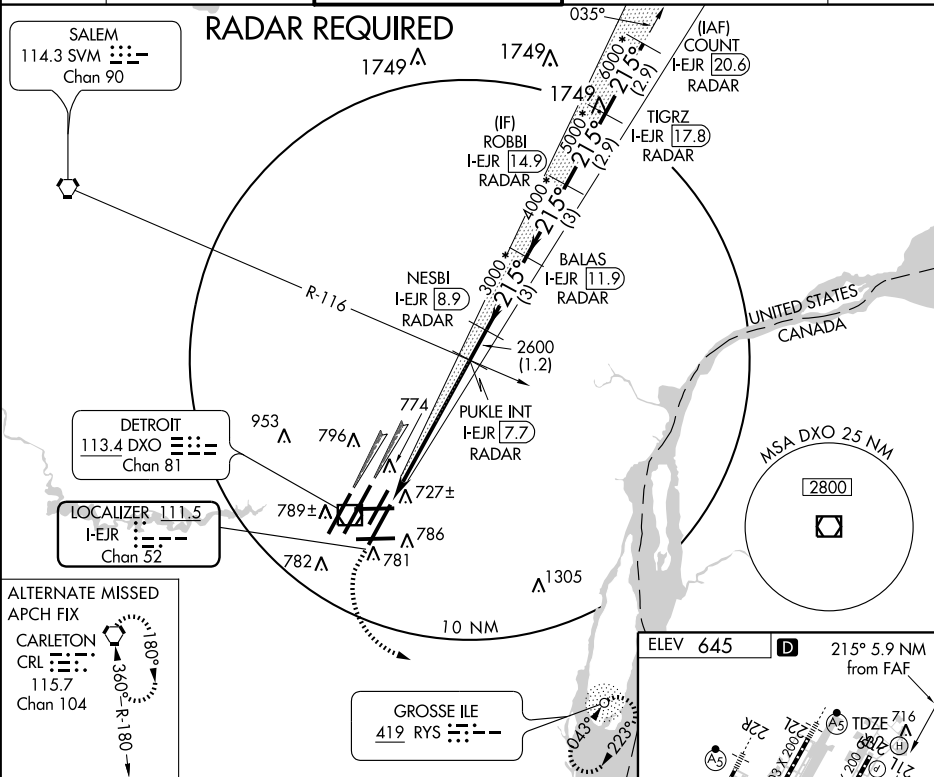
Simultaneous approach authorized with Rwy 22L or Rwy 22R. ADF and DME or RADAR Required. LOC procedure NA during simultaneous operations.
 ** RVR 1800 authorized with the use of FD or AP or HUD to DA.



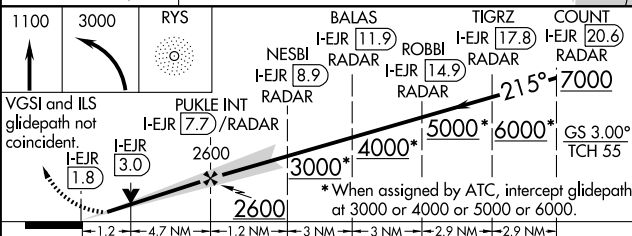
MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 direct RYS NDB and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------

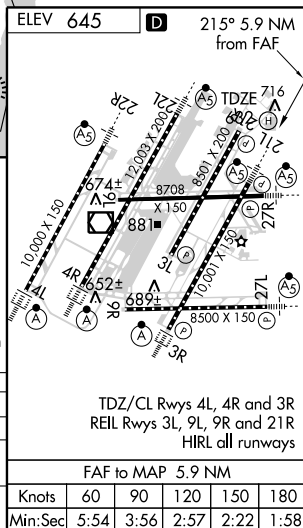
RADAR REQUIRED



ALTERNATE MISSED
APCH FIX
CARLETON
CRL
115.7
Chan 104



CATEGORY	A	B	C	D
S-ILS 21L	** 832/24 200 (200-½)			
S-LOC 21L	1100/24 468 (500-½)	1100/40 468 (500-¾)	1100/50 468 (500-1)	
CIRCLING	1200-1 555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)	



TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

LOC/DME I-DWC 110.7 Chan 44	APP CRS 215°	Rwy Idg TDZE 637 Apt Elev 645	12003
---	------------------------	---	--------------

ILS or LOC RWY 22L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous approach authorized with Rwy 21L. DME or RADAR Required. LOC procedure NA during simultaneous operations.
****RVR 1800 authorized with the use of FD or AP or HUD to DA.**

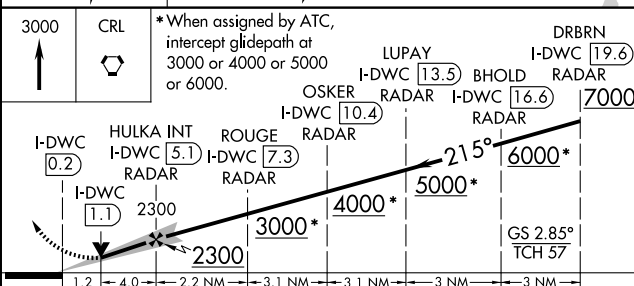
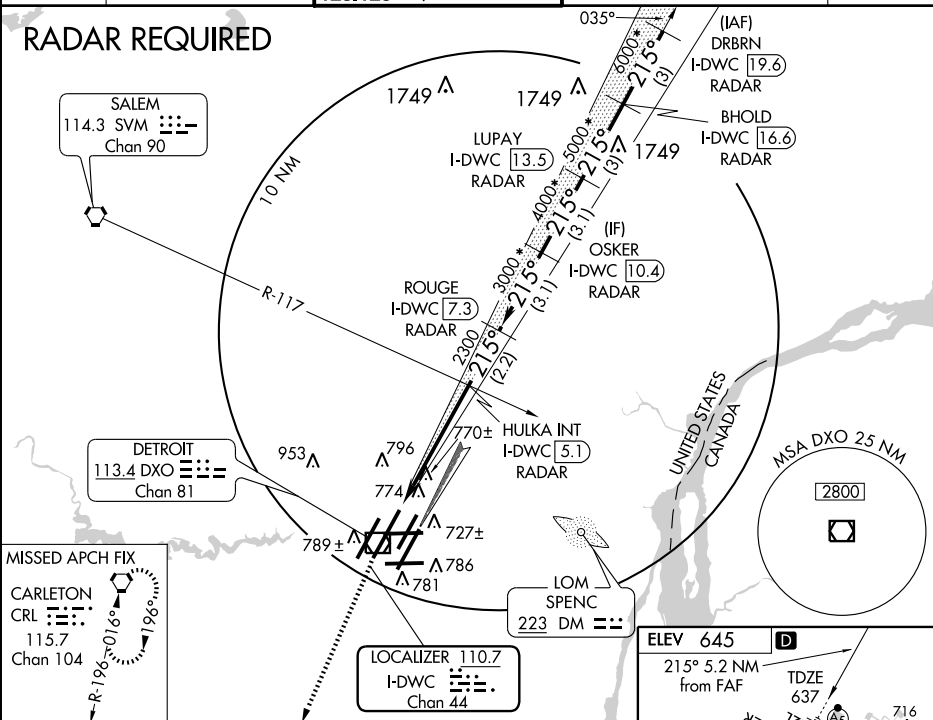
MALSR



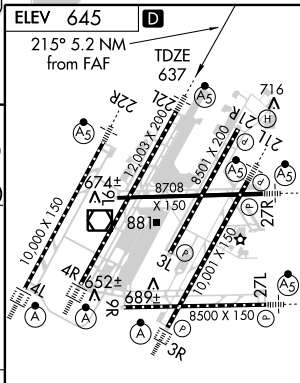
MISSED APPROACH: Climb to 3000
direct CRL VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65

RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 22L	1080/24 443 (500-½)	1080/40 443 (500-¾)	1080/50 443 (500-1)	1200-2 555 (600-2)
S-LOC 22L	1080/24 443 (500-½)	1080/40 443 (500-¾)	1080/50 443 (500-1)	1200-2 555 (600-2)
CIRCLING	1200-1 555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)	1200-2 555 (600-2)



FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

LOC I-EPA 110.15	APP CRS 275°	Rwy Idg TDZE Apt Elev	8500 631 646
----------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 27L

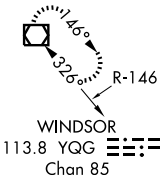
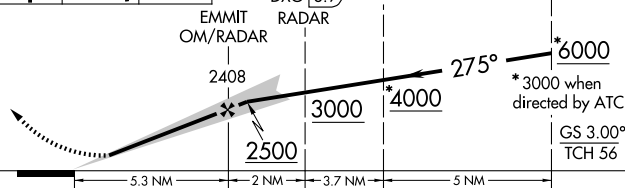
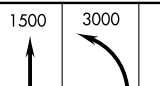
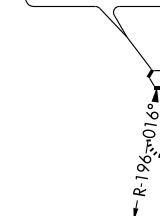
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ DME from DXO VOR/DME.
Simultaneous approach authorized with Rwy 27R.
RVR 1800 authorized with the use of FD or AP or HUD to DA.



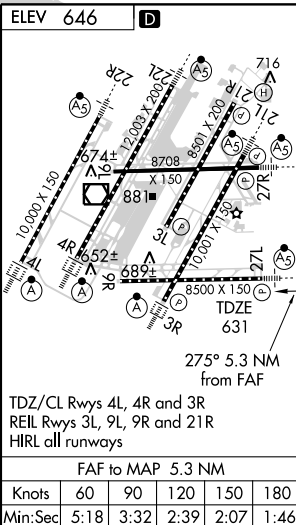
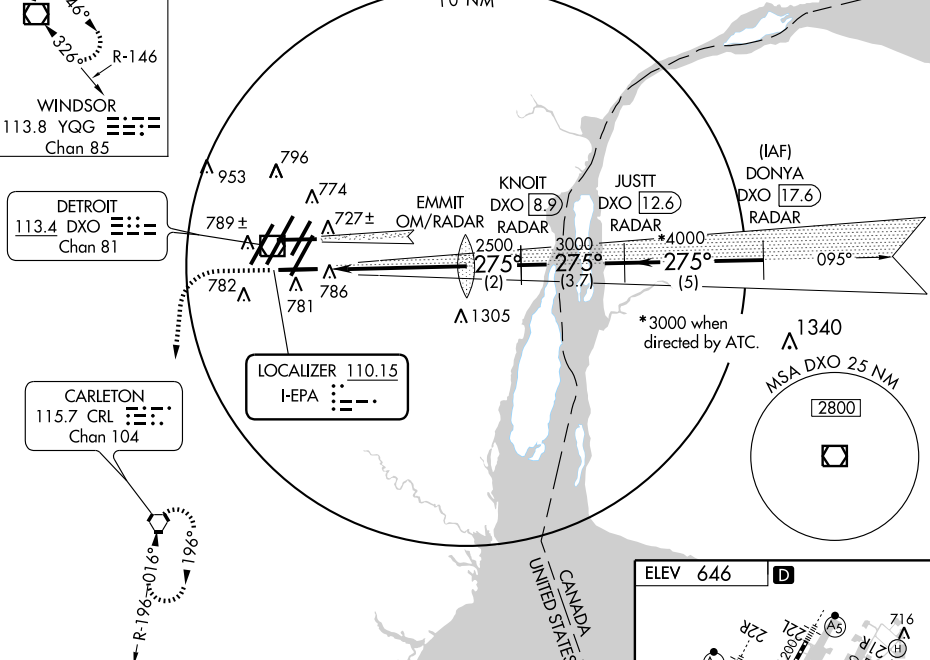
MISSED APPROACH: Climb to 1500
then climbing left turn to 3000 direct
CRL VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65

ALTERNATE MISSED
APCH FIXDETROIT
113.4 DXO Chan 81CARLETON
115.7 CRL Chan 104

CATEGORY	A	B	C	D
S-ILS 27L	# 831/24 200 (200-½)			
S-LOC 27L	1060/24 429 (500-½)	1060/40 429 (500-¾)	1060/50 429 (500-1)	
CIRCLING	1200-1 554 (600-1)	1200-1½ 554 (600-1½)	1200-2 554 (600-2)	

RADAR REQUIRED



LOC I-DMI	APP CRS	Rwy Idg	8708
108.5	275°	TDZE	635
		Apt Elev	646

ILS or LOC RWY 27R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

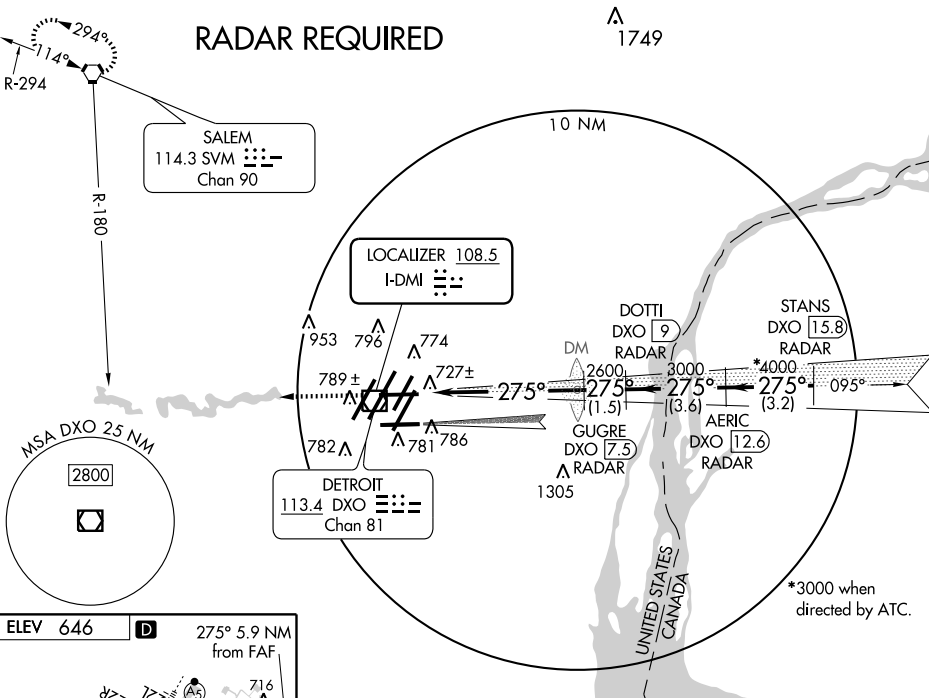
V DME from DXO VOR/DME. DME or Radar required.
 Simultaneous approach authorized with Rwy 27L.
 # RVR 1800 authorized with the use of FD or AP or HUD to DA.



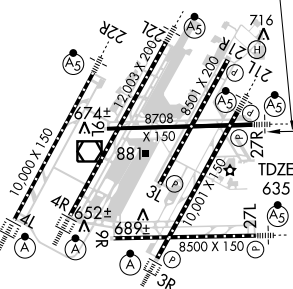
MISSED APPROACH: Climb to 3000 via heading 275° and SVM R-180 to SVM VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65

RADAR REQUIRED

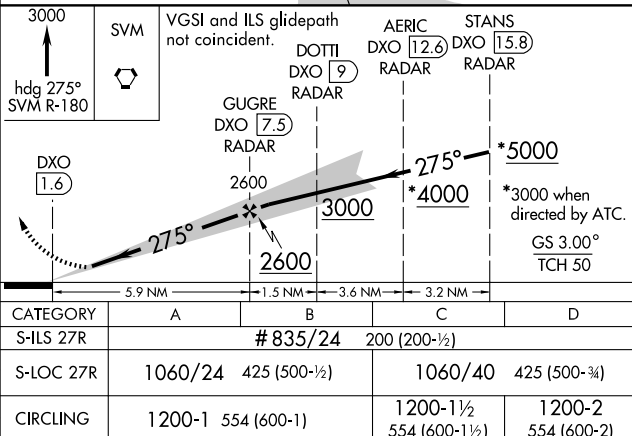


ELEV 646 **D** 275° 5.9 NM from FAF



TDZ/CL Rwy 4L, 4R and 3R
 REIL Rwy 3L, 9L, 9R and 21R
 HIRL all runways

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



DETROIT, MICHIGAN

AL-119 (FAA)

ILS PRM RWY 3R (CAT II)

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg 10001 TDZE 633 Apt Elev 645
---	------------------------	--

(SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

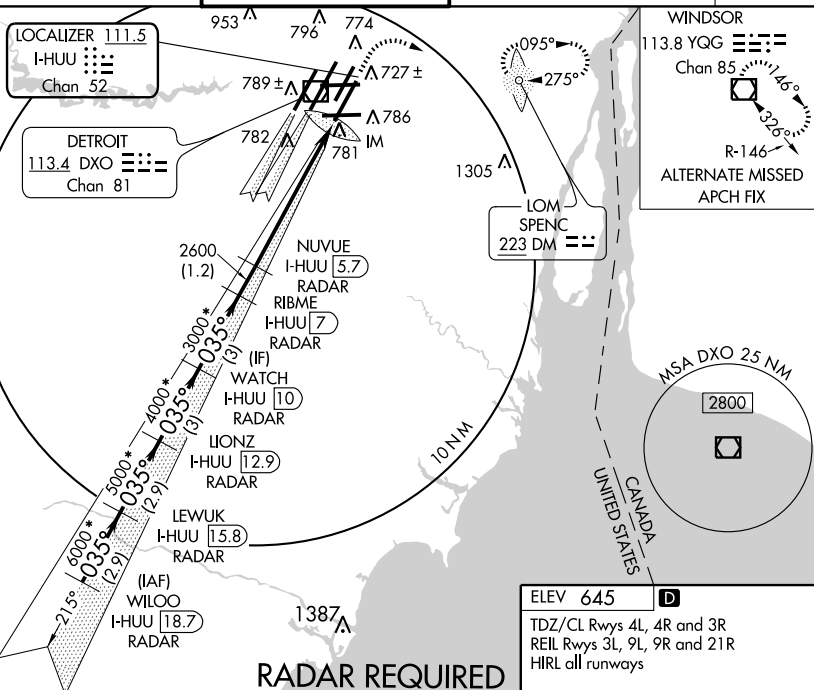
Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.

ALSF-2

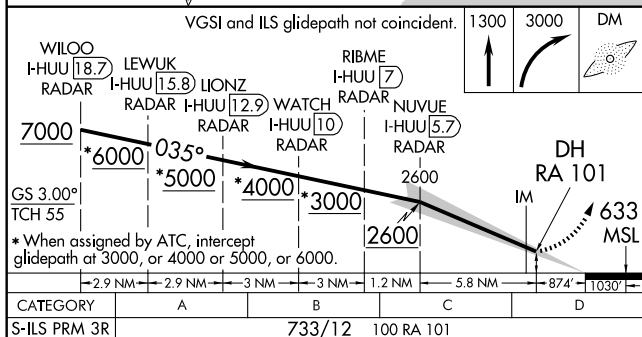


MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

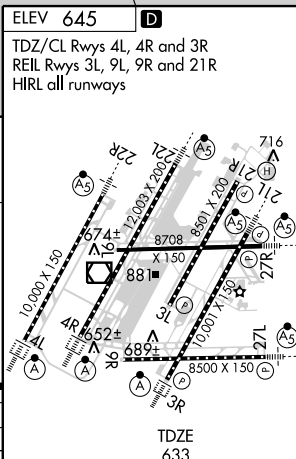
ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER (Rwy 4R/22L) 287.1 (Rwy 21L/3R) 287.1 (Rwy 4L/22R) 287.1 PRM 128.35	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------



RADAR REQUIRED



CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



DETROIT, MICHIGAN

Orig 10210

42°13'N - 83°21'W

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

ILS PRM RWY 3R (CAT II) (SIMULTANEOUS CLOSE PARALLEL)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:
"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg TDZE 633 Apt Elev 645	10001
---	------------------------	---	--------------

(SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

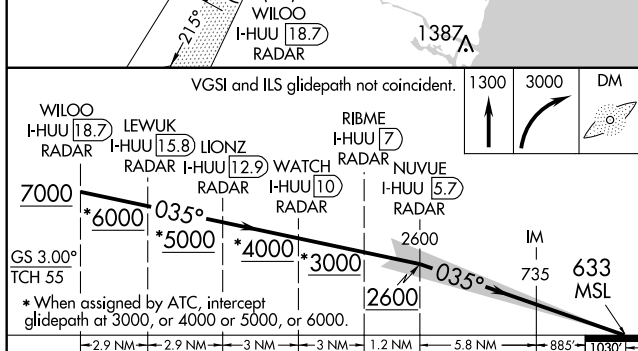
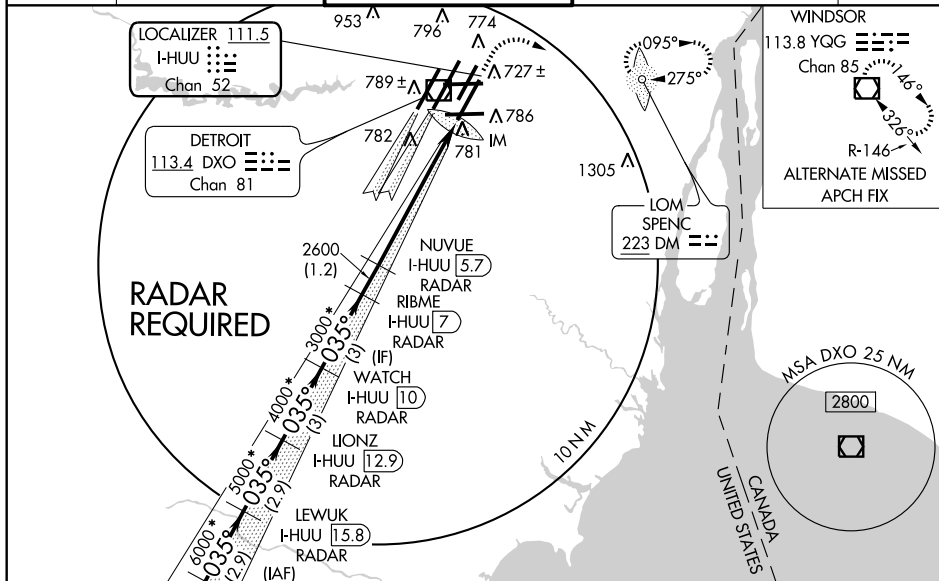
Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.

ALSF-2



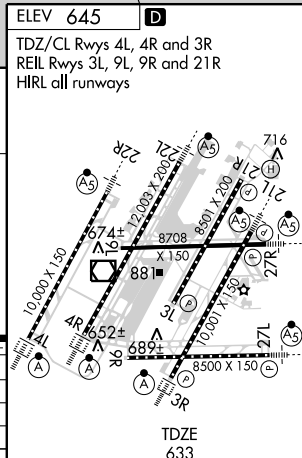
MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1 PRM 128.35	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



CATEGORY	A	B	C	D
S-ILS PRM 3R		CAT IIIa	RVR 07	
S-ILS PRM 3R		CAT IIIb	RVR 06	
S-ILS PRM 3R		CAT IIIc	NA	

**CATEGORY III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED**



ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg TDZE 633 Apt Elev 645
---	------------------------	---

(SIMULTANEOUS CLOSE PARALLEL)

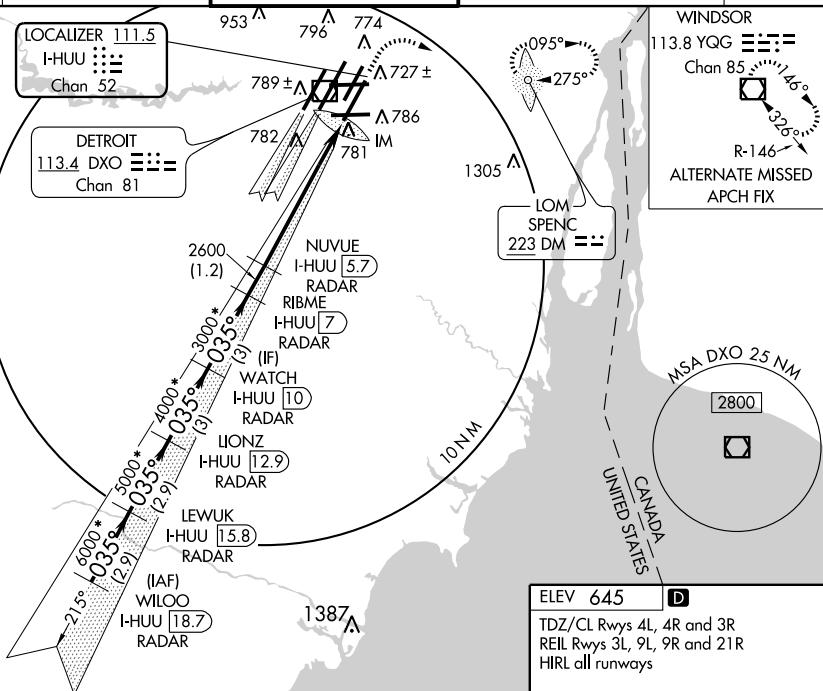
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.



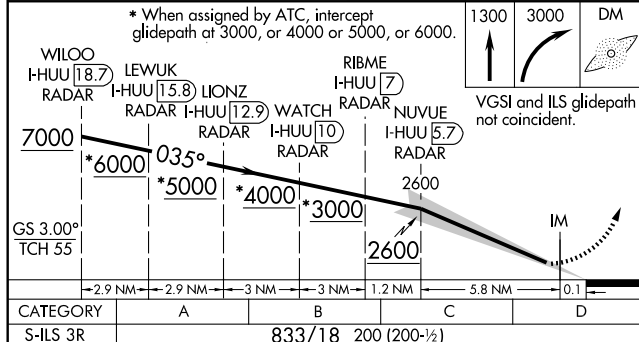
MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 118.4 (Rwy 21L/3R) 128.125 (Rwy 4L/22R) PRM 128.35	121.8 (NW) 132.72 (SW) 119.45 (NE) 119.25 (SE)	120.65

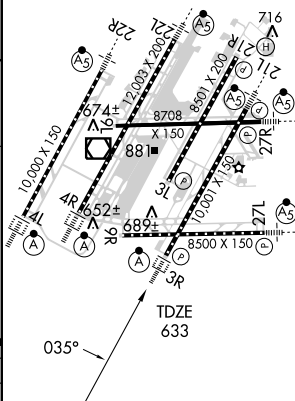


RADAR REQUIRED

* When assigned by ATC, intercept glidepath at 3000, or 4000 or 5000, or 6000.



ELEV 645
TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways



ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-DTW
110.7
Chan **44**

APP CRS
035°

Rwy Idg **12003**
TDZE **638**
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAUP.

ALSF-2



MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS

DETROIT APP CON

METRO TOWER

135.0 (Rwy 4R/22L) 287.1

118.4 (Rwy 21L/3R) 287.1

128.125 (Rwy 4L/22R) 287.1

PRM 135.775

GND CON

121.8 (NW)

119.45 (NE)

132.72 (SW)

119.25 (SE)

CLNC DEL

120.65

133.675

124.05 363.2 (WEST)

125.15 363.2 (EAST)

ADF and DME or RADAR
REQUIRED

MISSED APCH FIX



LOCALIZER 110.7

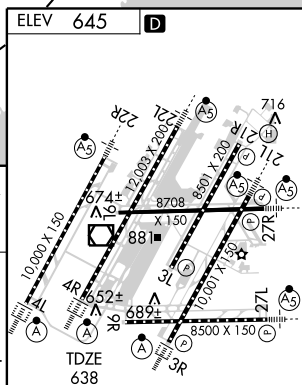
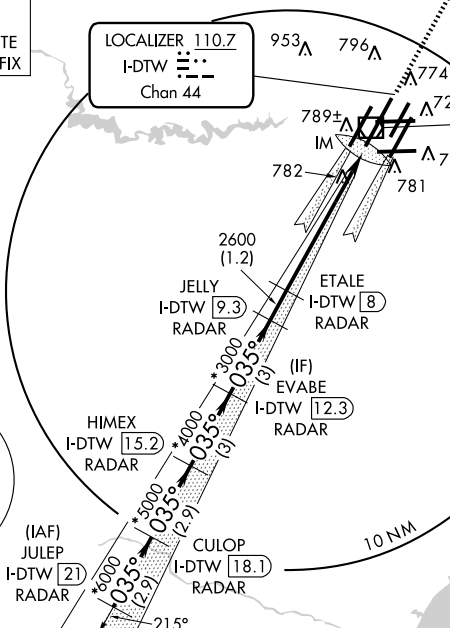
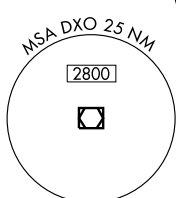
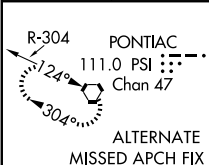
I-DTW

Chan 44

DETROIT

113.4 DXO

Chan 81



*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.					
JULEP I-DTW RADAR 21	CULOP I-DTW RADAR 18.1	HIMEX I-DTW RADAR 15.2	EVABE I-DTW RADAR 12.3	JELLY I-DTW RADAR 9.3	ETAL I-DTW RADAR 8
7000	6000	5000	4000	3000	2600
GS 3.00° TCH 54	2.9 NM	2.9 NM	3 NM	3 NM	1.2 NM
CATEGORY	A	B	C	D	
S-ILS 4R	738/12 100 RA 101				

CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

DETROIT, MICHIGAN

AL-119 (FAA)

ILS PRM RWY 4R (CAT III)

LOC/DME I-DTW
110.7
Chan **44**

APP CRS
035°

Rwy Idg **12003**
TDZE **638**
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

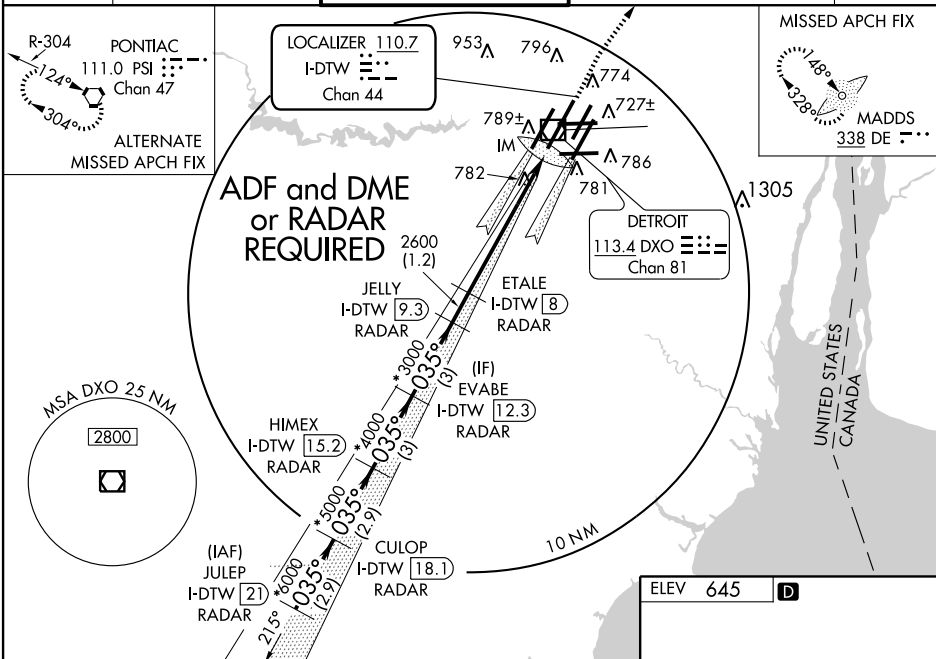
Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAUP.

ALSF-2



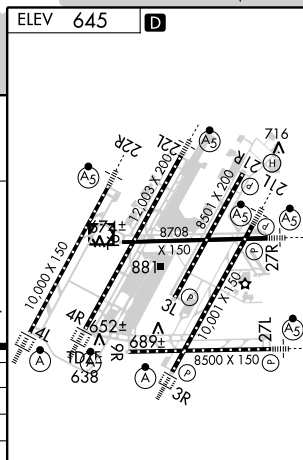
MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1 PRM 135.775	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.

CATEGORY	A	B	C	D
S-ILS 4R		CAT IIIa	RVR 700	
S-ILS 4R		CAT IIIb	RVR 600	
S-ILS 4R		CAT IIIc	NA	



TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

DETROIT, MICHIGAN

42°13'N - 83°21'W

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Orig 10210

ILS PRM RWY 4R (CAT III) (SIMULTANEOUS CLOSE PARALLEL)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.

- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-DTW
110.7
Chan **44**

APP CRS
035°

Rwy Idg **12003**
TDZE **638**
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAPP.

ALSF-2



MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS

DETROIT APP CON

METRO TOWER
135.0 (Rwy 4R/22L) **287.1**
118.4 (Rwy 21L/3R) **287.1**
128.125 (Rwy 4L/22R) **287.1**
PRM 135.775

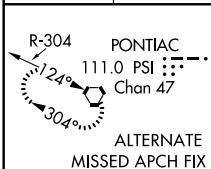
GND CON

CLNC DEL

133.675

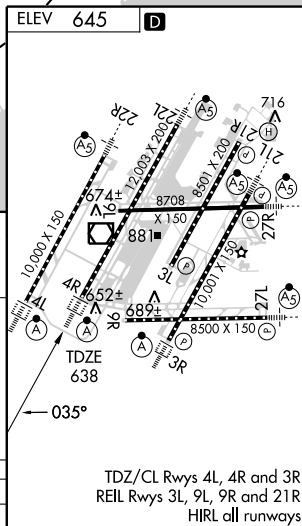
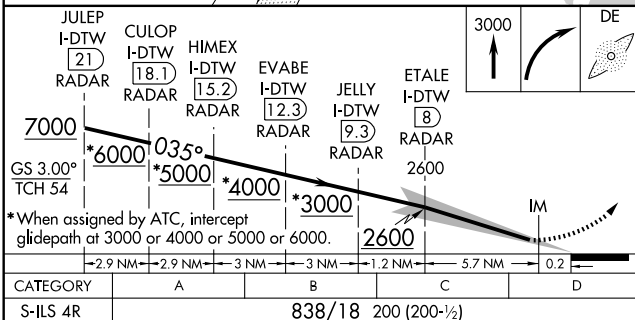
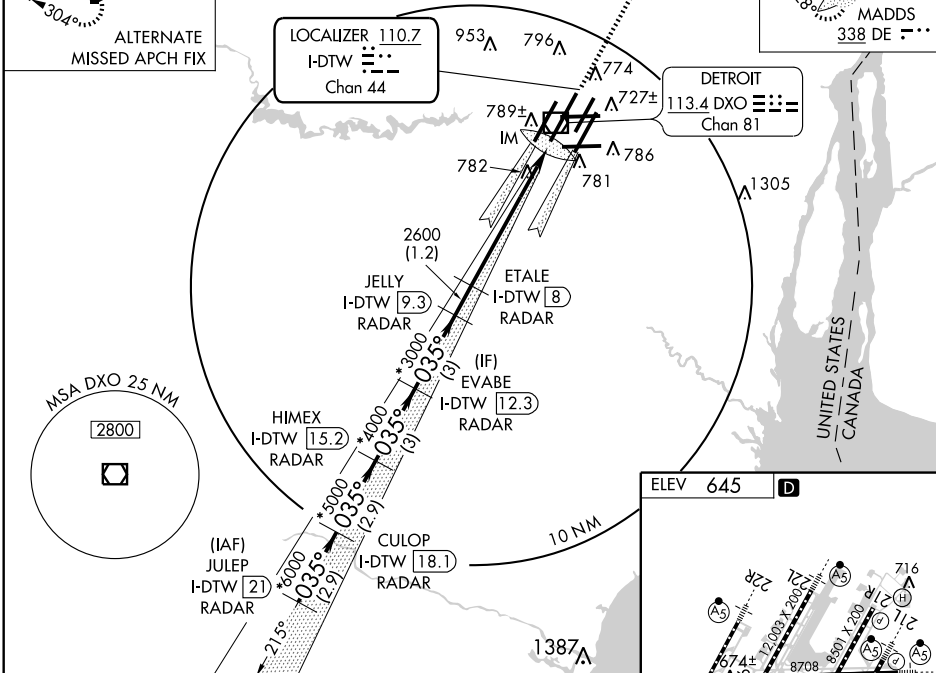
124.05 363.2 (WEST)
125.15 363.2 (EAST)

121.8 (NW) **119.45** (NE)
132.72 (SW) **119.25** (SE)

120.65

ADF and DME or RADAR
REQUIRED

MISSED APCH FIX



ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

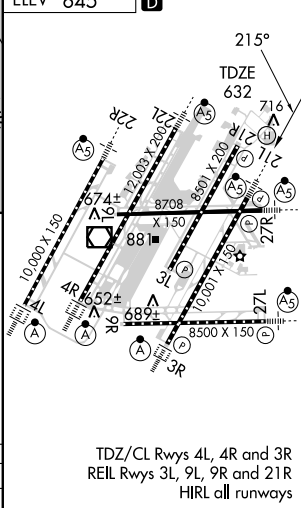
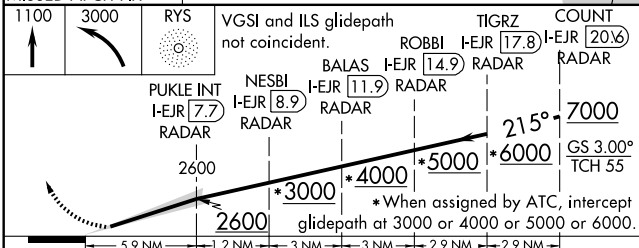
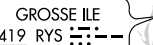
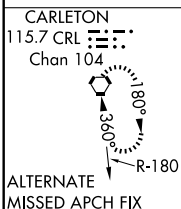
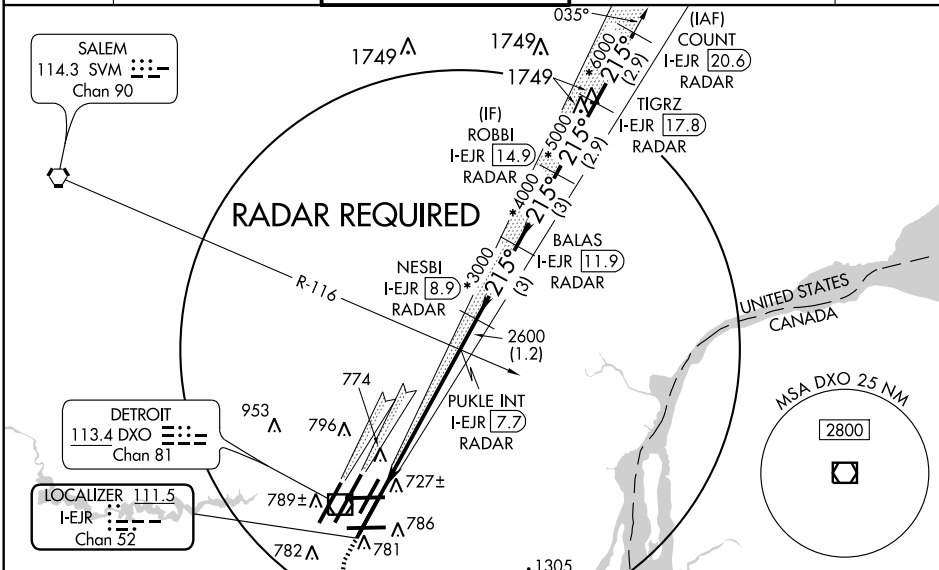
Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-EJR 111.5 Chan 52	APP CRS 215°	Rwy Idg TDZE Apt Elev	10001 632 645
---	------------------------	-----------------------------	--

(SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

V Simultaneous close parallel approach authorized with ILS PRM Rwy 22L and ILS PRM Rwy 22R. Procedure NA when glideslope not available. ADF and RADAR or DME Required. Dual VHF Comm Required. See additional requirements on AAUP. ** RVR 1800 authorized with the use of FD or HUD to DA.			MALSR 	MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 direct RYS NDB and hold.
ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1 PRM 128.35	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65



ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 21L approach. If later advised to expect an ILS 21L approach, the ILS/PRM 21L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 21L approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)", the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

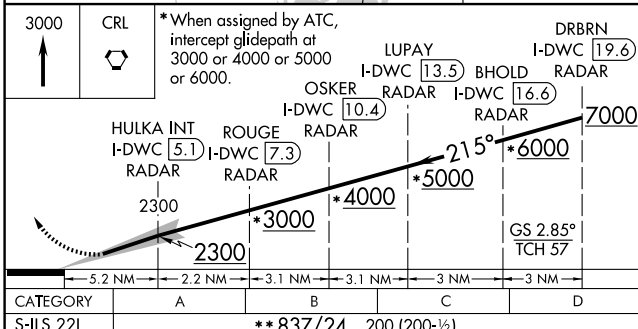
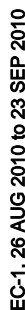
4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

(SIMULTANEOUS CLOSE PARALLEL)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

MISSED APPROACH:
Climb to 3000 direct
CRL VORTAC and hold.

RADAR REQUIRED



ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 22L approach. If later advised to expect an ILS 22L approach, the ILS/PRM 22L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 22L approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)", the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg TDZE 633 Apt Elev 645	10001
---	------------------------	---	--------------

ILS RWY 3R (CAT II)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

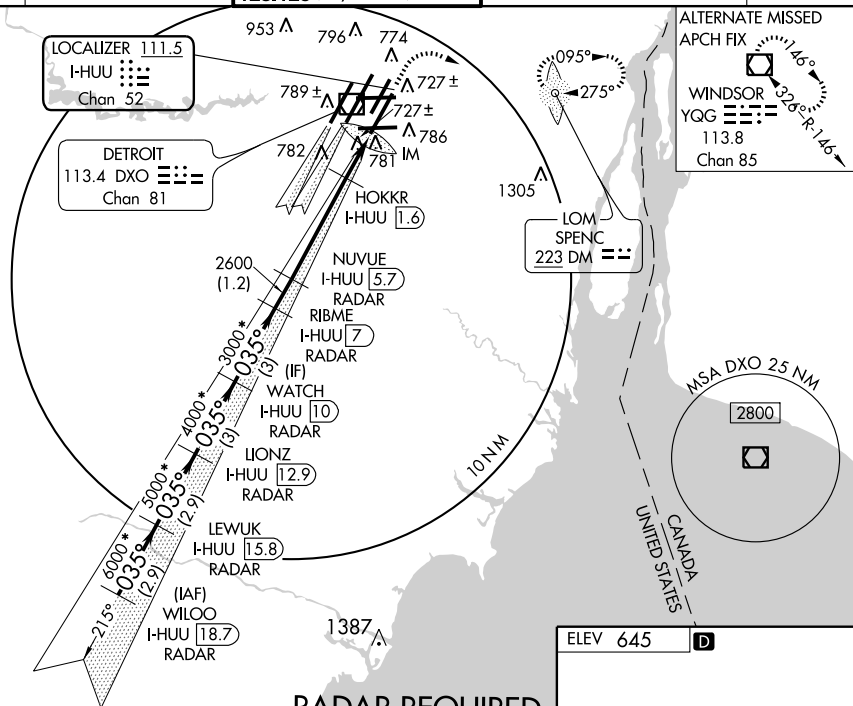
Simultaneous approach authorized with Rwy 4R or Rwy 4L.
ADF and DME or Radar Required.

ALSF-2

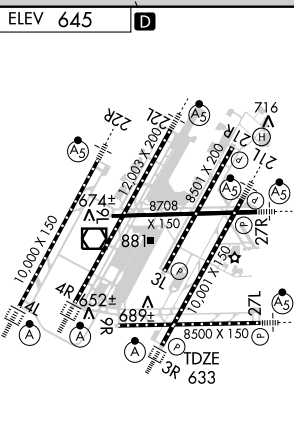
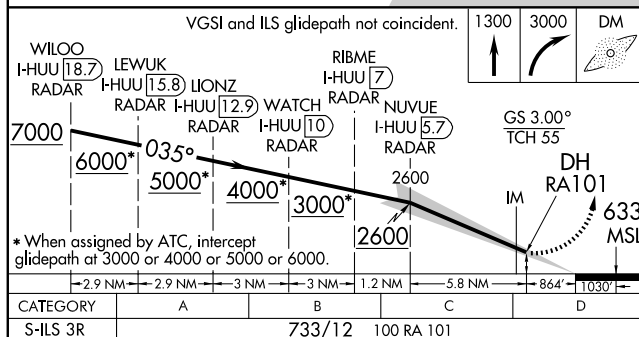


MISSED APPROACH: Climb to
1300 then climbing right turn to
3000 direct SPENC LOM and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------



RADAR REQUIRED



TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

LOC/DME I-HUU 111.5 Chan 52	APP CRS 035°	Rwy Idg TDZE 633 Apt Elev 645
---	------------------------	---

ILS RWY 3R (CAT III)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

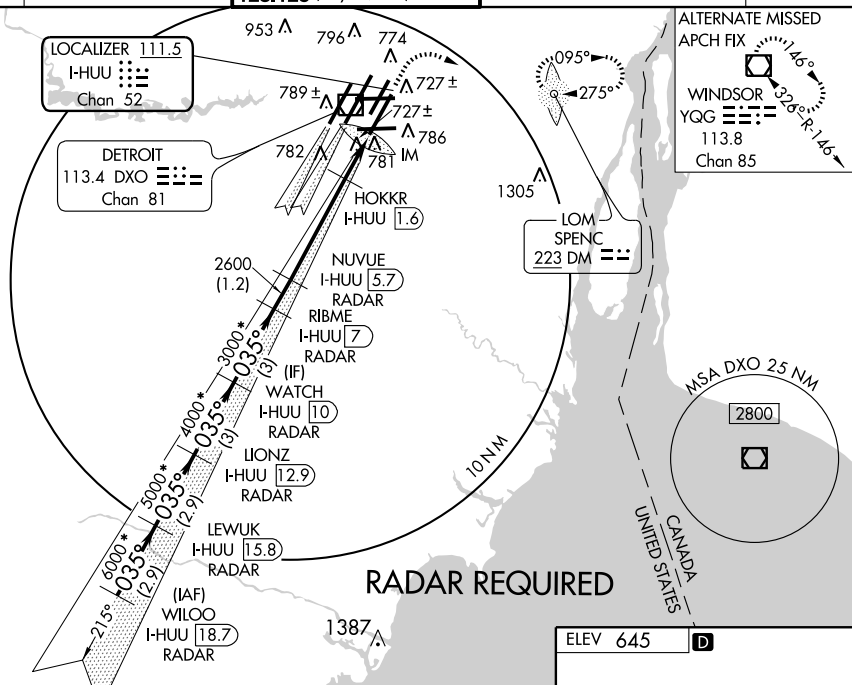
Simultaneous approach authorized with Rwy 4R or Rwy 4L.
ADF and DME or Radar Required.

ALSF-2

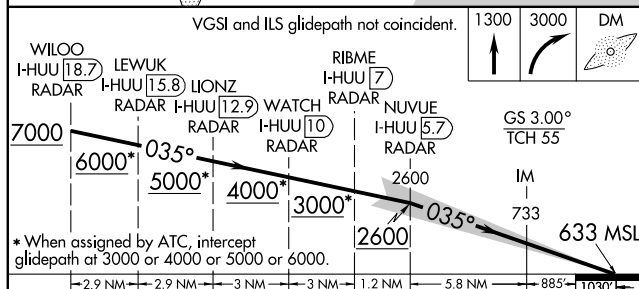


MISSED APPROACH: Climb to
1300 then climbing right turn to
3000 direct SPENC LOM and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------



RADAR REQUIRED



* When assigned by ATC, intercept
glidepath at 3000 or 4000 or 5000 or 6000.

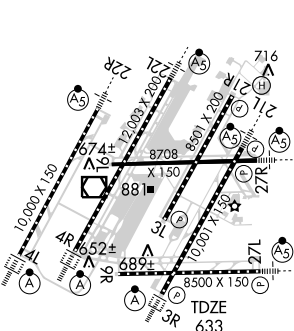
7000 6000* 5000* 4000* 3000* 2600 633 MSL

CATEGORY	A	B	C	D
S-ILS 3R		CAT IIIa	RVR 07	
S-ILS 3R		CAT IIIb	RVR 06	
S-ILS 3R		CAT IIIc	NA	

**CATEGORY III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED**

ELEV 645

D



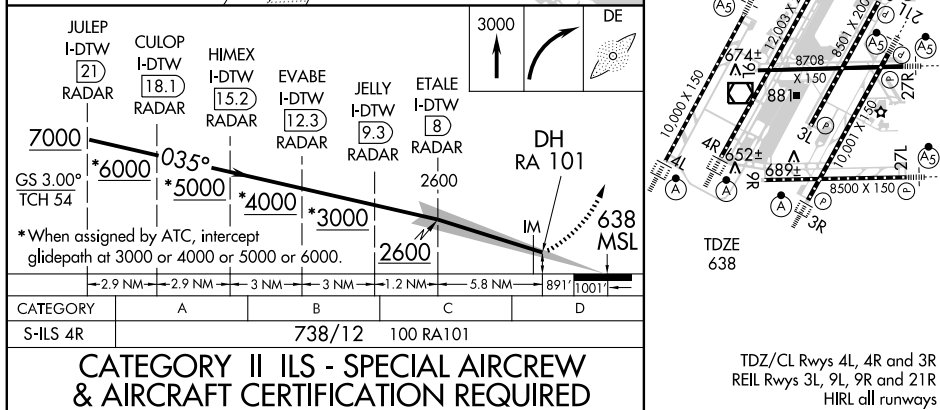
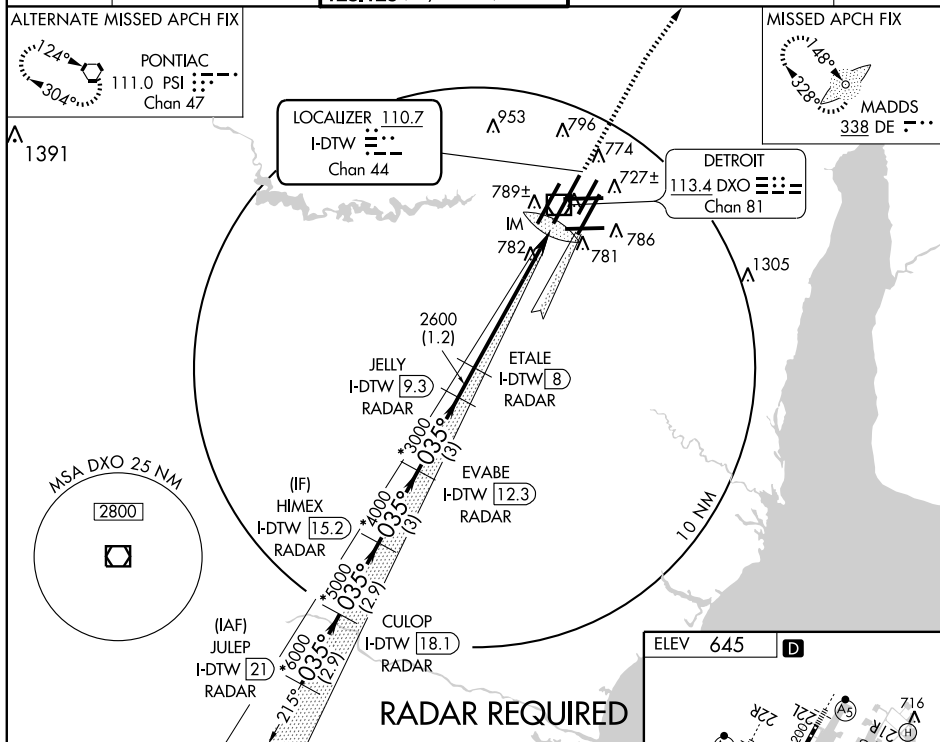
TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

LOC/DME I-DTW 110.7 Chan 44	APP CRS 035°	Rwy Idg TDZE Apt Elev	12003 638 645
---	------------------------	-----------------------------	--

ILS RWY 4R (CAT II)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ Simultaneous approach authorized with ILS Rwy 3R. ADF and DME or Radar Required.		ALSF-2 	MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.	
ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER (Rwy 4R/22L) 287.1 (Rwy 21L/3R) 287.1 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65



LOC/DME I-DTW 110.7 Chan 44	APP CRS 035°	Rwy Idg TDZE Apt Elev	12003 638 645
---	------------------------	-----------------------------	--

ILS RWY 4R (CAT III)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



Simultaneous approach authorized with ILS Rwy 3R.
ADF and DME or Radar Required.

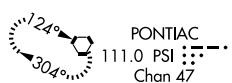
ALSF-2



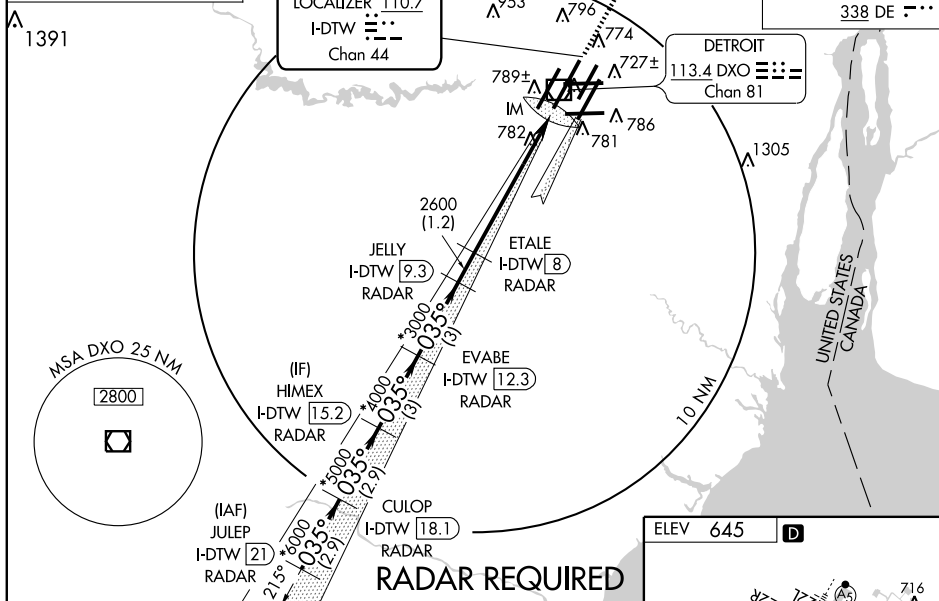
MISSED APPROACH: Climb to 3000 then
right turn direct MADDS LOM and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	---	--	---------------------------

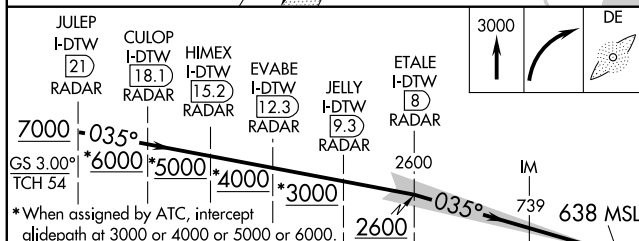
ALTERNATE MISSED APCH FIX



MISSED APCH FIX



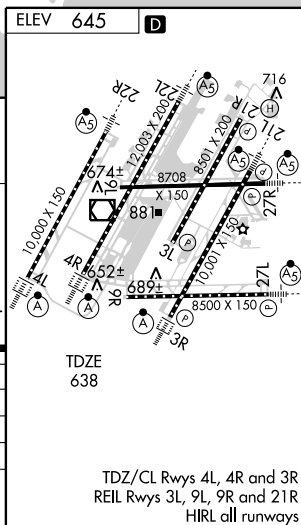
RADAR REQUIRED



* When assigned by ATC, intercept
glidepath at 3000 or 4000 or 5000 or 6000.

CATEGORY	A	B	C	D
S-ILS 4R		CAT IIIa	RVR 07	
S-ILS 4R		CAT IIIb	RVR 06	
S-ILS 4R		CAT IIIc	NA	

**CATEGORY III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED**



TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

DETROIT, MICHIGAN

AL-119 (FAA)

ILS Y PRM RWY 4L

(SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

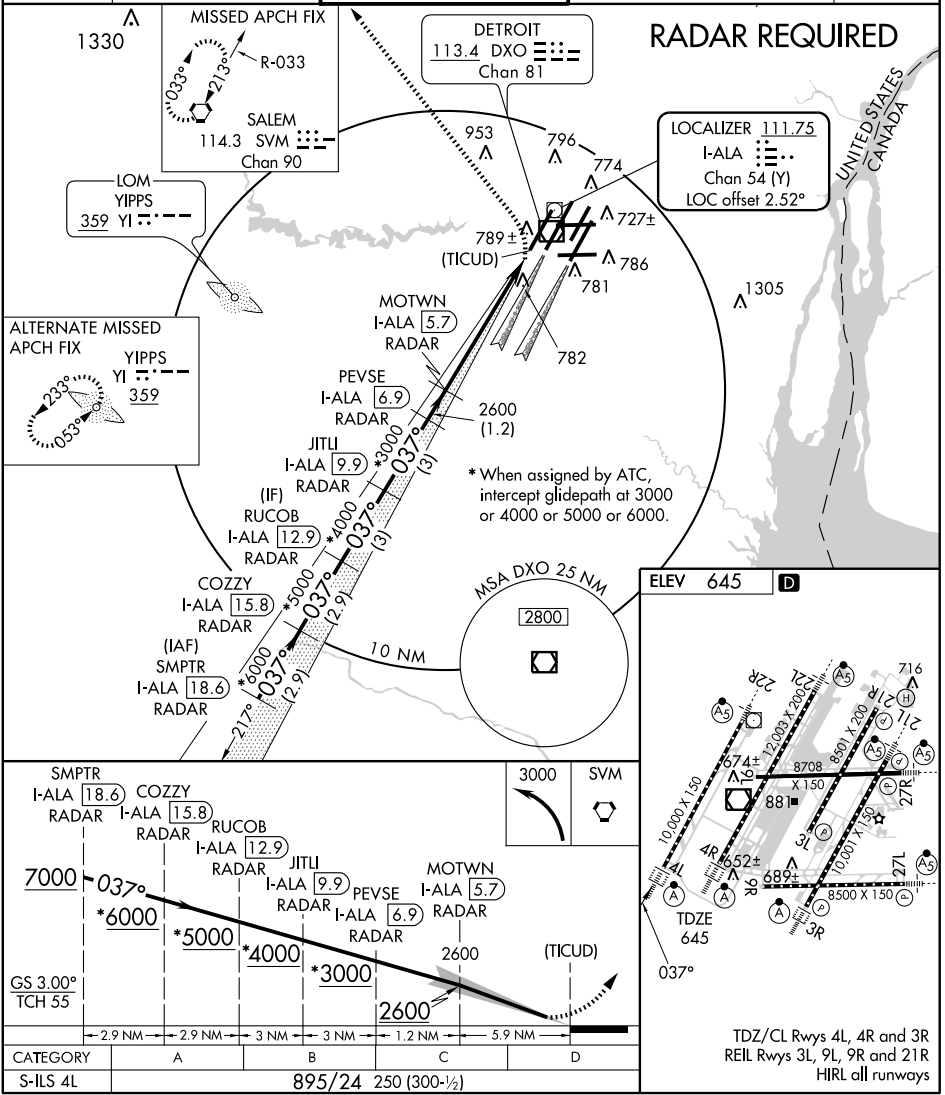
LOC/DME I-ALA 111.75 Chan 54 (Y)	APP CRS 037°	Rwy Idg TDZE Apt Elev	10000 645 645
--	------------------------	-----------------------------	--

▼ DME or RADAR required. Procedure NA when glideslope not available. See additional requirements on AAPP. Dual VHF comm required. Simultaneous close parallel approach authorized with ILS PRM RWY 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III).

ALSF-2
A

MISSED APPROACH: Climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1 PRM 127.05	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	--	--	---------------------------



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.
- Exit the runway at Taxiway A7 (6700 ft) or A8 (7700 ft) whenever practical, see Taxiway Use below.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4L approach. If later advised to expect an ILS 4L Yankee approach, the ILS/PRM 4L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4L Yankee approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

5. **Taxiway Use:** Because of the location of the offset LOC critical area, whenever practical, pilots should exit the runway at taxiway A7, 6700 ft or A8, 7700 ft. If feasible, do not stop on taxiways A9 and A10, or on taxiway A northeast of taxiway V.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

DETROIT, MICHIGAN

AL-119 (FAA)

ILS Y PRM RWY 22R

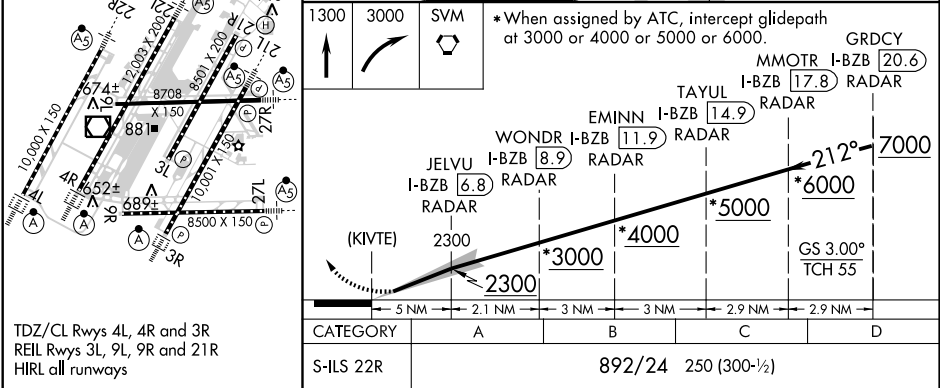
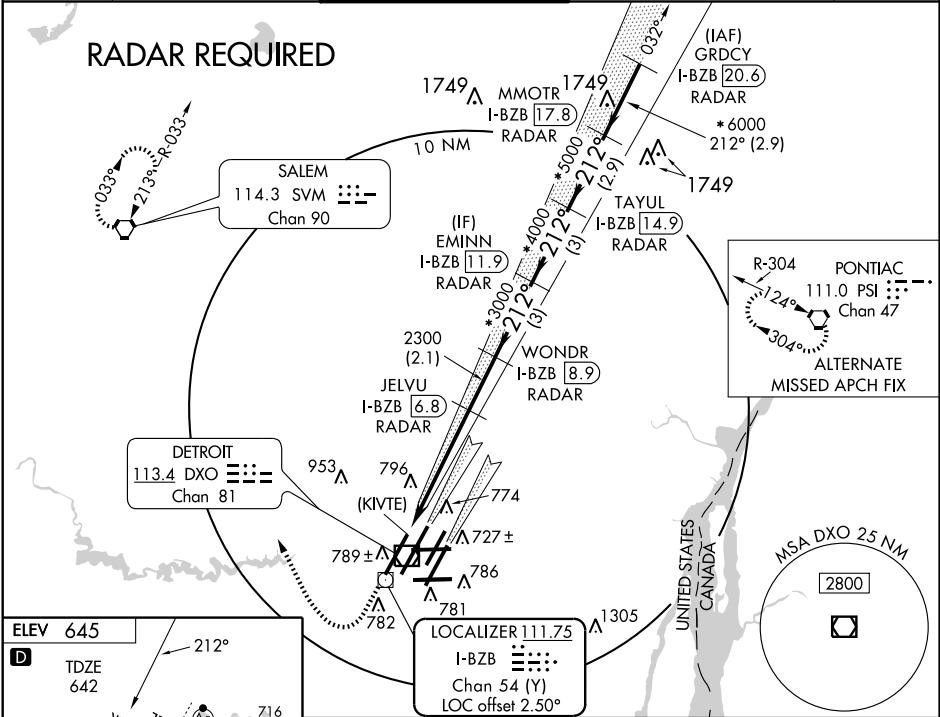
LOC/DME I-BZB 111.75 Chan 54 (Y)	APP CRS 212°	Rwy Idg TDZE Apt Elev	10000 642 645
--	------------------------	-----------------------------	--

(SIMULTANEOUS CLOSE PARALLEL)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ DME or RADAR Required. Procedure NA when glideslope not available. Simultaneous close parallel approach authorized with ILS PRM Rwy 22L and ILS PRM Rwy 21L. Dual VHF Comm Required. See additional requirements on AAUP.	MALSR 	MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SVM VORTAC and hold.
--	-----------	---

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1 PRM 127.05	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	--	--	---------------------------

RADAR REQUIRED



DETROIT, MICHIGAN 42°13'N - 83°21'W DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Orig-A 17DEC09 ILS Y PRM RWY 22R (SIMULTANEOUS CLOSE PARALLEL)

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.
- Exit the runway at Taxiway A4 (6700 ft) or A3 (7700 ft) whenever practical, see Exit Taxiway Use below.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 22R approach. If later advised to expect an ILS 22R Yankee approach, the ILS/PRM 22R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 22R Yankee approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

5. **Exit Taxiway Use:** Because of the location of the offset LOC critical area, whenever possible, pilots should exit the runway at taxiway A4, 6700 ft or A3, 7700 ft. If practical, do not stop on taxiway A between taxiway A3 and taxiway Q.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-ALA 111.75 Chan 54 (Y)	APP CRS 037°	Rwy Idg 10000 TDZE 645 Apt Elev 645
--	------------------------	--

ILS Y RWY 4L
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

T DME or RADAR REQUIRED. LOC procedure NA during simultaneous operations. Simultaneous approach authorized with Rwy 3R. Procedure NA when glideslope not available.

ALSF-2

MISSED APPROACH: Climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS
100.675

DETROIT APP CON

4.05	363.2	(WEST)
5.15	363.2	(EAST)

METRO TOWER		
135.0	(Rwy 4R/22L)	287.1
118.4	(Rwy 21L/3R)	287.1
128.125	(Rwy 4L/22R)	287.1

GND CON

121.8 (NW)	119.45 (NE)
132.72 (SW)	119.25 (SE)

CLNC DEL
120.65


MISSED APCH FIX

LOM
YIPPS
2. VI

* When assigned by ATC,
intercept glidepath at 3000
or 4000 or 5000 or 6000.

RADAR REQUIRED

LOCALIZER 111.75
I-ALA :::
Chan 54 (Y)
LOC offset 2.52°

DETROIT
113.4 DXO 
Chan 81

MOTWN
I-ALA 5.7
RADAR

PEVSE
ALA 6.9
RADAR

JITLI
I-ALA 9.9
RADAR

RUCOB
I-ALA 12.
RADAR

COZZY
I-ALA 15
RADAR

I-ALA 18.

MSA DXO 25 NM

2800

ELEV 64.5

P

ALTERNATE MISSED
APCH FIX

SMPTR
I-ALA 18.6 COZZY
RADAR I-ALA 15.8 RUCOB
RADAR I-ALA 12

RADAR I-ALA 12
RADAR

RADAR 1-A
i R

RADAR

RAD,

MOTWN
-AIA 57

EVSE I-A
A 6.9 R

7000 | -037°.

GS 3.00°

CATEGORY	DESCRIPTION	AMOUNT	DATE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

DETROIT, MICHIGAN
Orig 10210

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

ILS Y RWY 4L

LOC/DME I-BZB 111.75 Chan 54 (Y)	APP CRS 212°	Rwy ldg TDZE Apt Elev	10000 642 645
--	------------------------	-----------------------------	--

ILS Y RWY 22R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

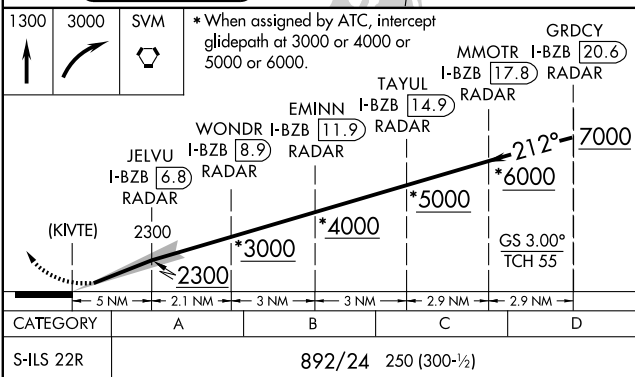
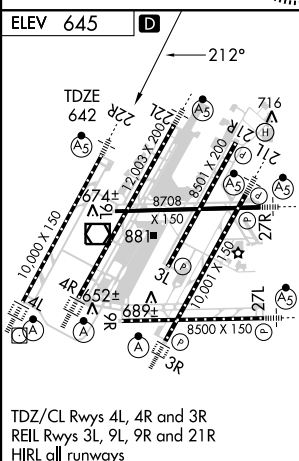
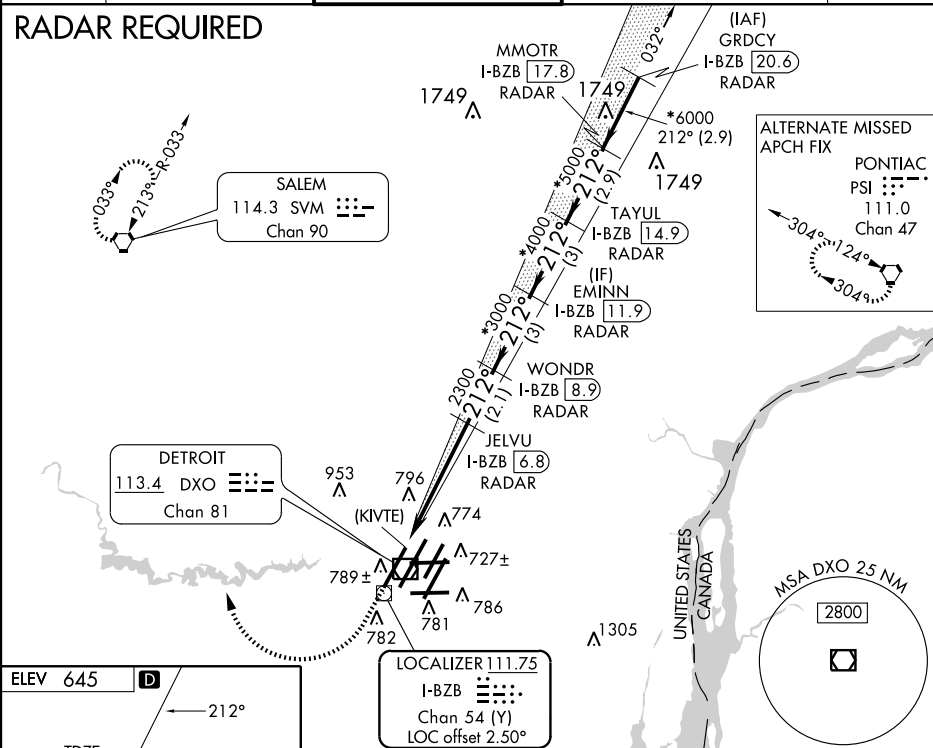
▼ DME or RADAR REQUIRED.
Simultaneous approach authorized with Rwy 21L.
Procedure NA when glideslope not available.
LOC procedure NA during simultaneous operations.



MISSED APPROACH: Climb to 1300
then climbing right turn to 3000 direct
SVM VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 (Rwy 21L/3R) 118.4 (Rwy 4L/22R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65

RADAR REQUIRED



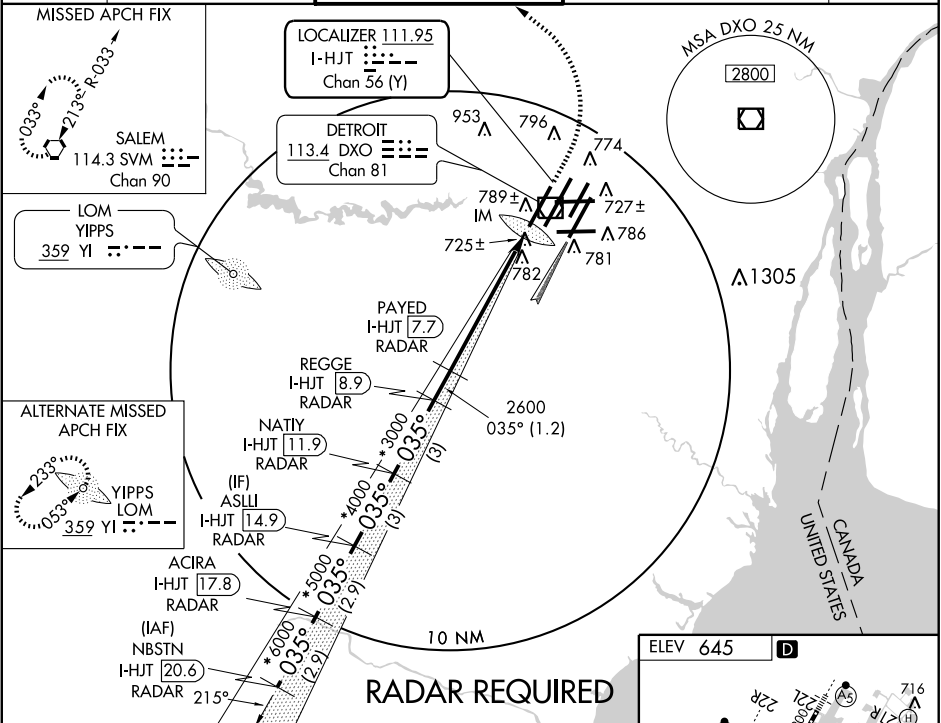
LOC/DME I-HJT	APP CRS	Rwy Idg	10000
111.95	035°	TDZE	645
Chan 56 (Y)		Apt Elev	645

ILS Z or LOC RWY 4L

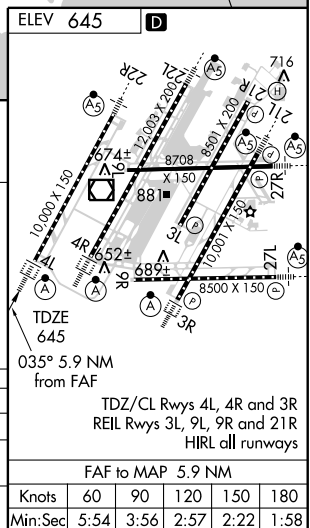
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ DME or RADAR Required. Simultaneous approach authorized with Rwy 3R. LOC procedure NA during simultaneous operations.	ALSF-2 	MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct SVM VORTAC and hold.
--	------------	---

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER (Rwy 4R/22L) 287.1 (Rwy 21L/3R) 287.1 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	--	--	---------------------------



NBSTN I-HJT 20.6 RADAR	ACIRA I-HJT 17.8 RADAR	ASLI I-HJT 14.9 RADAR	NATY I-HJT 11.9 RADAR	REGGE I-HJT 8.9 RADAR	PAYED I-HJT 7.7 RADAR	I-HJT 1.8
* When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.						
7000	035°	*6000	*5000	*4000	*3000	2600
GS 3.00°	TCH 52	2.9 NM	2.9 NM	3 NM	3 NM	1.2 NM
<div> <div>1300</div> <div>3000</div> <div>SVM</div> </div>						
CATEGORY	A	B	C	D		
S-ILS 4L	845/18 200 (200-½)					
S-LOC 4L	1000/24 355 (400-½)					1000/40 355 (400-¾)
CIRCLING	1200-1 555 (600-1)		1200-1½ 555 (600-1½)		1200-2 555 (600-2)	



ILS Z or LOC RWY 22R
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

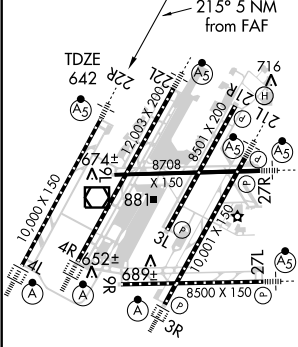
MALSR

MISSED APPROACH: Climb to 1300 then climbing right turn via heading 225° to 3000 then right turn direct SVM VORTAC and hold.

[illegible]

RADAR REQUIRED

ELEV 645	D
----------	---

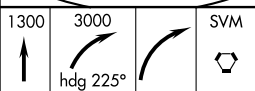


TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

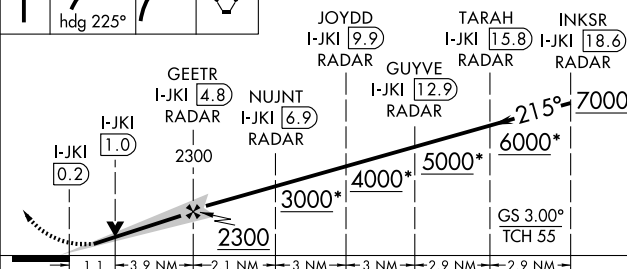
FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

Amdt 2A 17DEC09



* When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.



CATEGORY	A	B	C	D
S-ILS 22R	**842/24 200 (200-½)			
S-LOC 22R	1060/24 418 (500-½)		1060/40 418 (500-¾)	
CIRCLING	1200-1 555 (600-1)		1200-1½ 555 (600-1½)	1200-2 555 (600-2)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

ILS Z or LOC RWY 22R

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

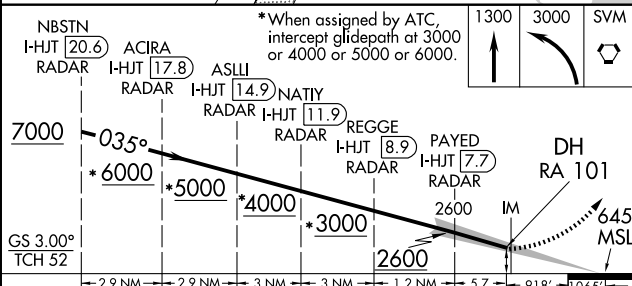
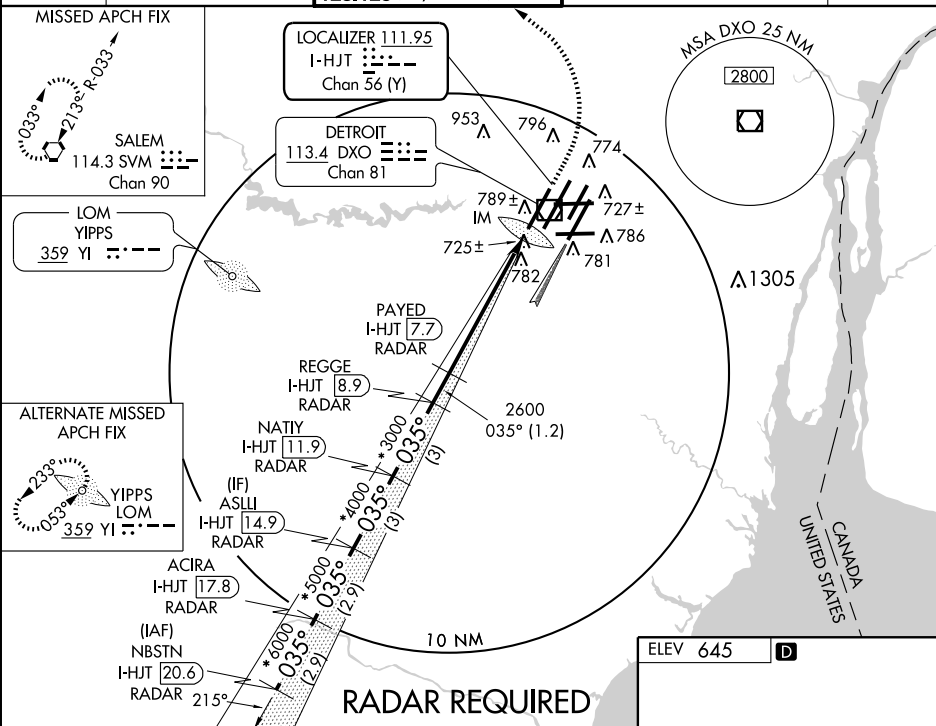
LOC/DME I-HJT 111.95 Chan 56 (Y)	APP CRS 035°	Rwy Idg TDZE Apt Elev 10000 645 645
--	------------------------	---

ILS Z RWY 4L (CAT II)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

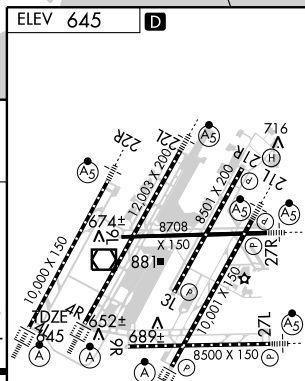
▼ DME or RADAR Required. Simultaneous approach authorized with Rwy 3R. LOC procedure NA during simultaneous operations.	ALSF-2 	MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER (Rwy 4R/22L) 287.1 (Rwy 21L/3R) 287.1 (Rwy 4L/22R) 287.1	GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	CLNC DEL 120.65
------------------------	---	--	--	---------------------------



CATEGORY	A	B	C	D
S-ILS 4L	745/12	100 RA 101		



**CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED**

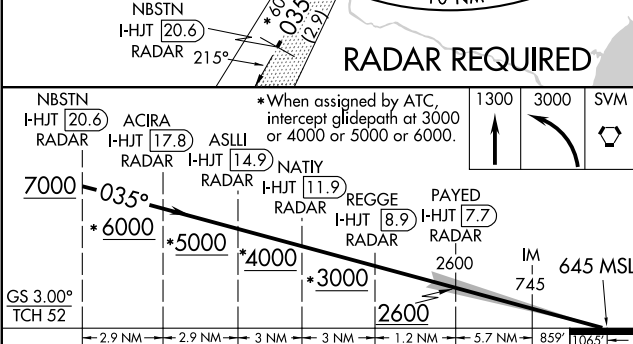
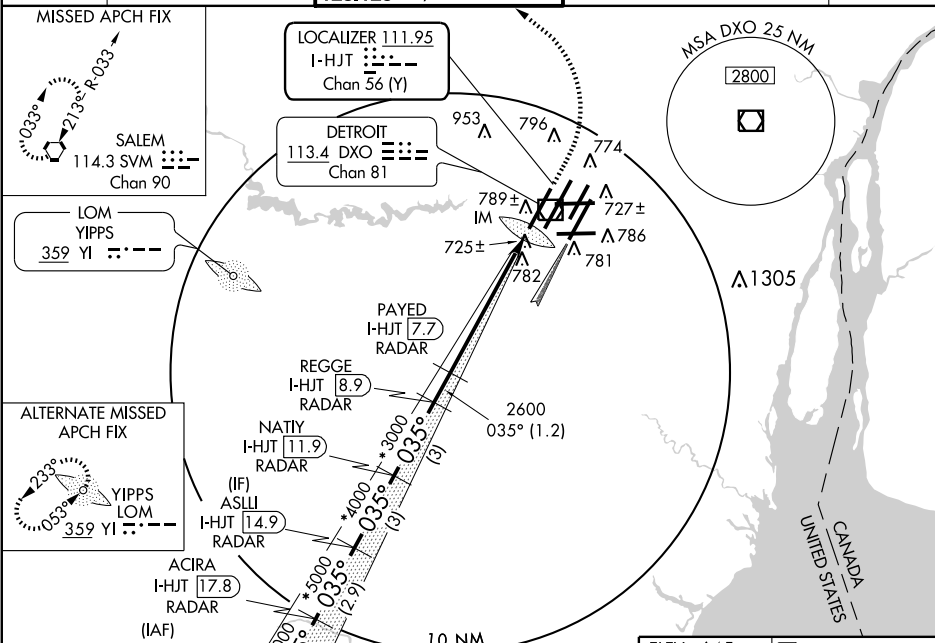


TDZ/CL Rwy 4L, 4R and 3R
 REIL Rwy 3L, 9L, 9R and 21R
 HIRL all runways

LOC/DME I-HJT <u>111.95</u> Chan 56(Y)	APP CRS 035°	Rwy Idg 10000 TDZE 645 Apt Elev 645
--	------------------------	--

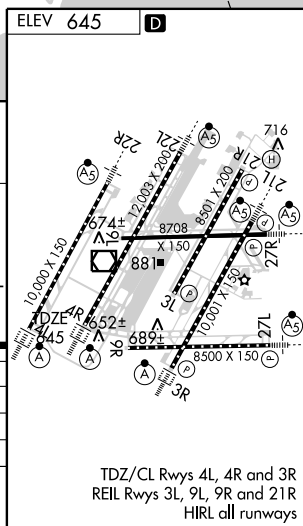
ILS Z RWY 4L (CAT III)
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

	DME or RADAR Required Simultaneous approach authorized with Rwy 3R. LOC procedure NA during simultaneous operations.		ALSF-2 		MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct SVM VORTAC and hold.	
	ATIS 133.675	DETROIT APP CON 124.05 363.2 (WEST) 125.15 363.2 (EAST)	METRO TOWER 135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1		GND CON 121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)		CLNC DEL 120.65



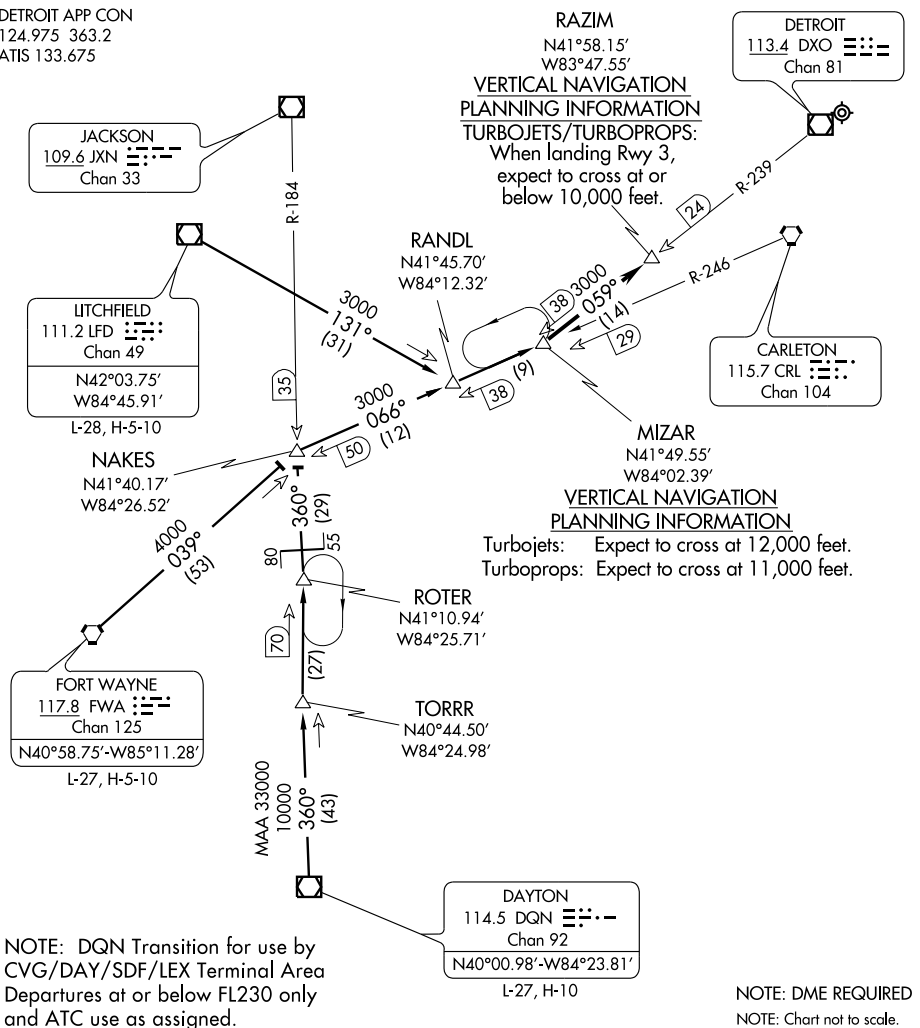
CATEGORY	A	B	C	D
S-ILS 4L		CAT IIIa	RVR 07	
S-ILS 4L		CAT IIIb	RVR 06	
S-ILS 4L		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED



MIZAR THREE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY
DETROIT, MICHIGANDETROIT APP CON
124.975 363.2
ATIS 133.675

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

MIZAR THREE ARRIVAL

(MIZAR.MIZAR3) 08325

DETROIT, MICHIGAN
DETROIT METROPOLITAN WAYNE COUNTY



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-083 to MOONN INT, then via (transition). Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.

Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

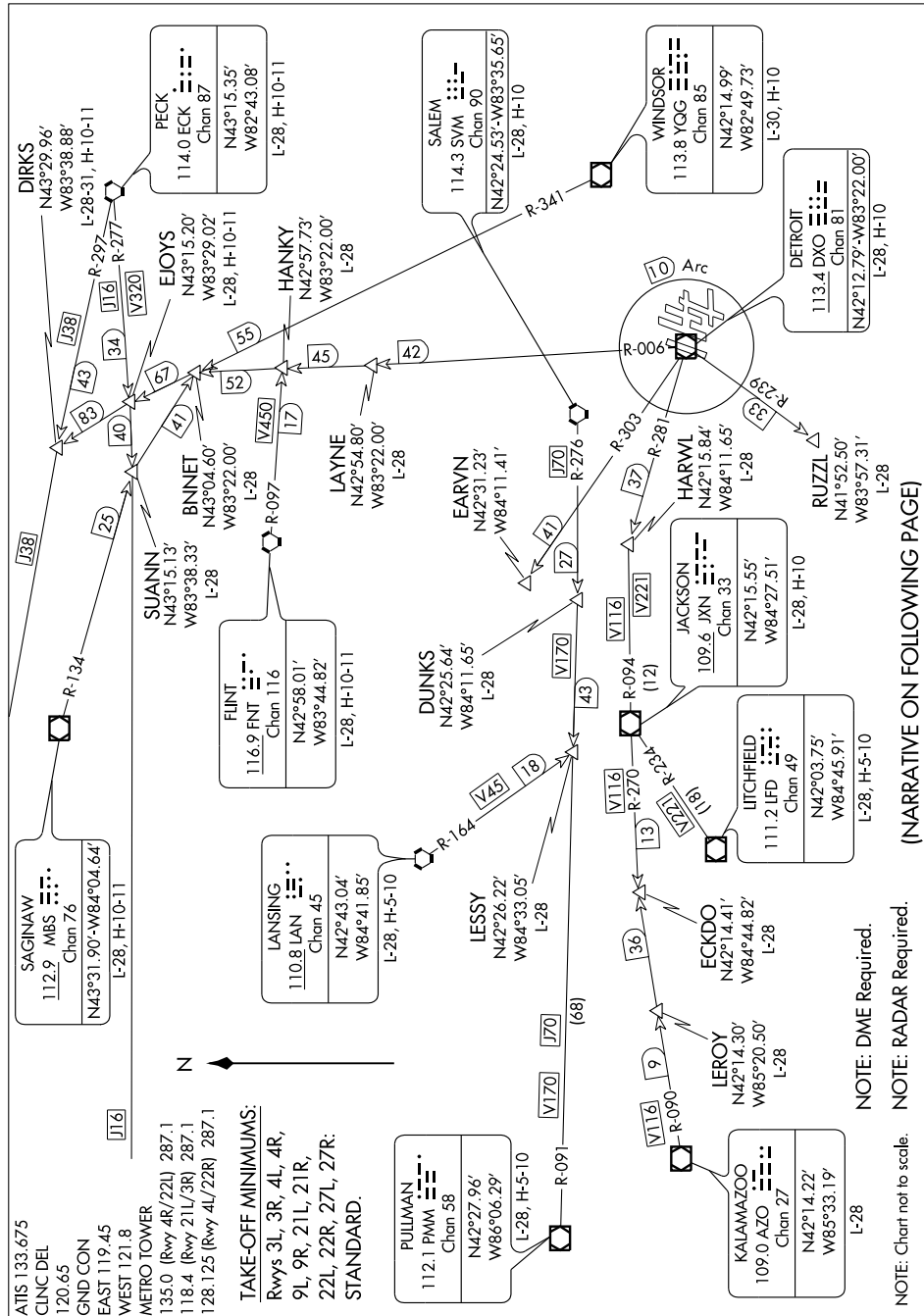
Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 26 AUG 2010 TO 23 SEP 2010



EC-1, 26 AUG 2010 TO 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned Airway or Radial then proceed to the assigned departure fix, thence via the assigned route. Jets maintain 10,000 feet, cross the DXO VOR/DME 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below. Prop aircraft departing Rwy 21L/R and 22L/R westbound cross DXO 3.5 DME at or above 2500 MSL. If unable advise ATC prior to departure. Jets use Departure Control Frequency 125.525. Props use Departure Control Frequency 118.95.

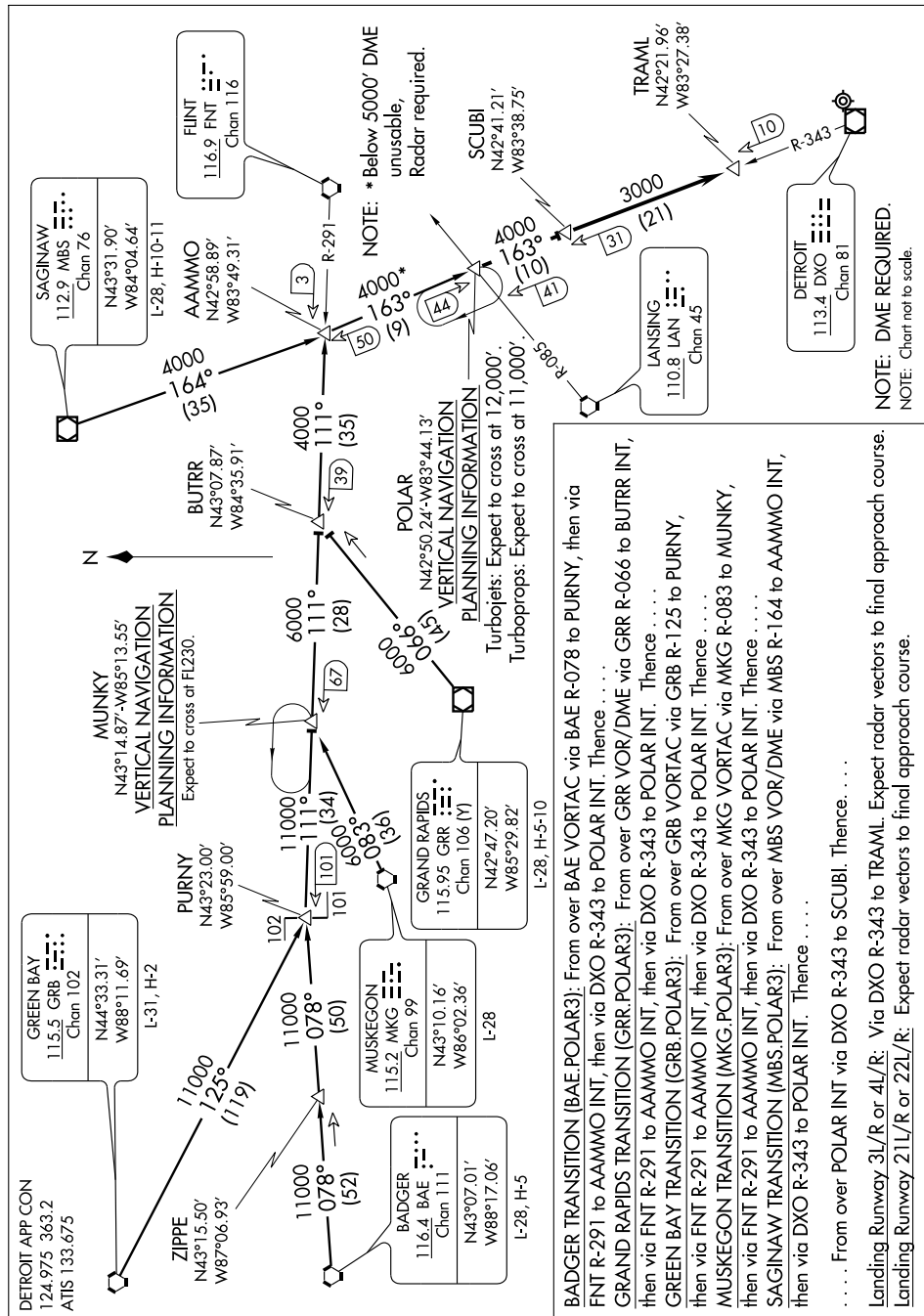
TAKE-OFF OBSTACLES

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

POLAR THREE ARRIVAL

ST-119 (FAA)

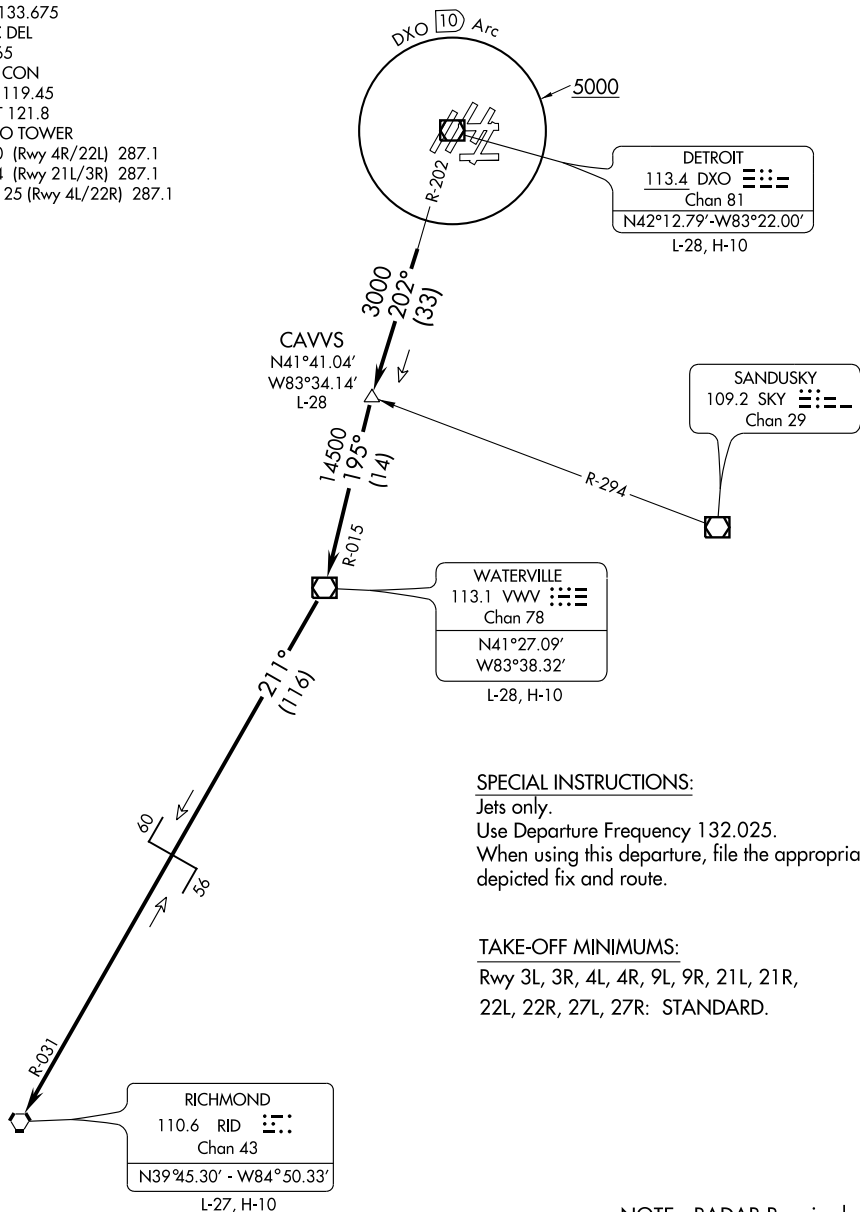
EC-1, 26 AUG 2010 to 23 SEP 2010



POLAR THREE ARRIVAL

EC-1, 26 AUG 2010 to 23 SEP 2010

ATIS 133.675
CLNC DEL
120.65
GND CON
EAST 119.45
WEST 121.8
METRO TOWER
135.0 (Rwy 4R/22L) 287.1
118.4 (Rwy 21L/3R) 287.1
128.125 (Rwy 4L/22R) 287.1



SPECIAL INSTRUCTIONS:
Jets only.
Use Departure Frequency 132.025.
When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:
Rwy 3L, 3R, 4L, 4R, 9L, 9R, 21L, 21R, 22L, 22R, 27L, 27R: STANDARD.

NOTE: RADAR Required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 10,000 feet, cross DXO 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

WAAS CH 61304 W03A	APP CRS 035°	Rwy Idg 10001 TDZE 633 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 3R

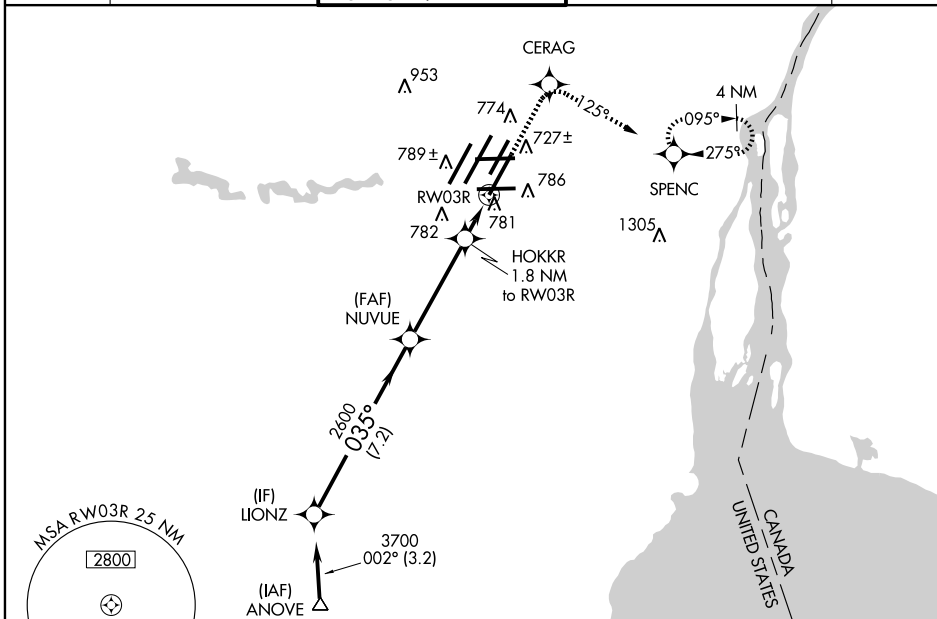
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative ALSF-2, increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below
-16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

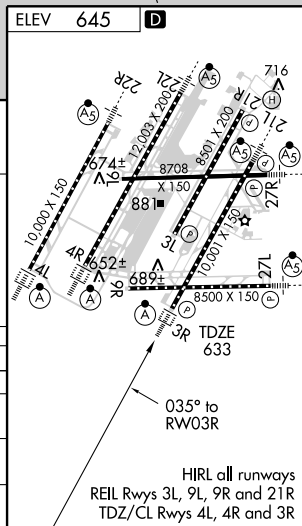


MISSED APPROACH: Climb to 3000 direct
CERAG and right turn via 125° track to SPENC
and hold, continue climb-in-hold to 3000.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



CATEGORY		A	B	C	D
LPV	DA	957/24	324 (400-½)		
LNAV/VNAV	DA	1031/40	398 (400-¾)		
LNAV	MDA	1060/24	427 (500-½)	1060/40 427 (500-¾)	1060/50 427 (500-1)
CIRCLING		1200-1	555 (600-1)	1200-1 555 (600-½)	1200-2 555 (600-2)



WAAS CH 77520 W04A	APP CRS 035°	Rwy Idg 10000 TDZE 645 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 4L

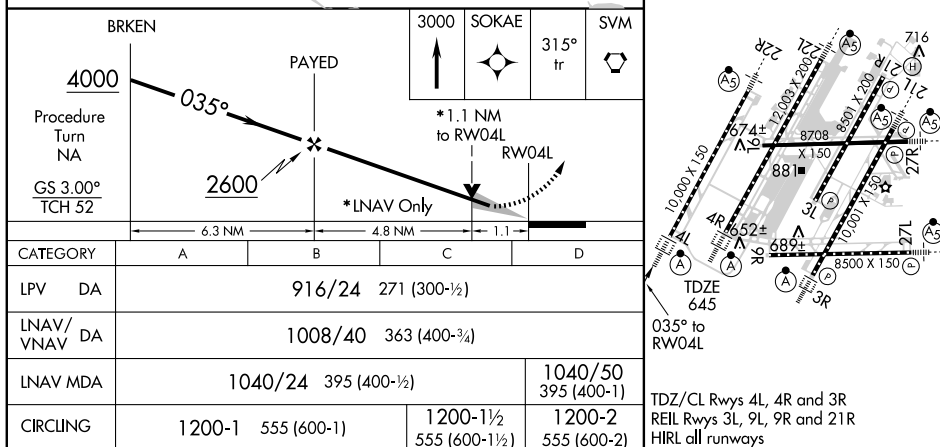
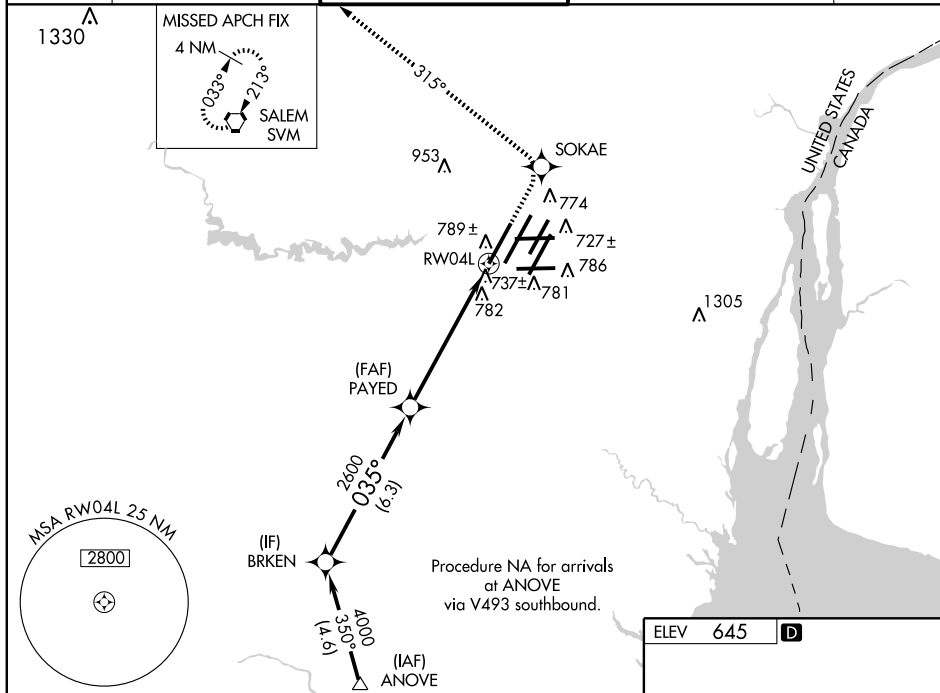
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative ALSF-2, increase LPV all Cats visibility to RVR 5000, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 3000 direct SOKAE and via 315° track to SVM VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



WAAS CH 63004 W04A	APP CRS 035°	Rwy ldg 12003 TDZE 638 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 4R

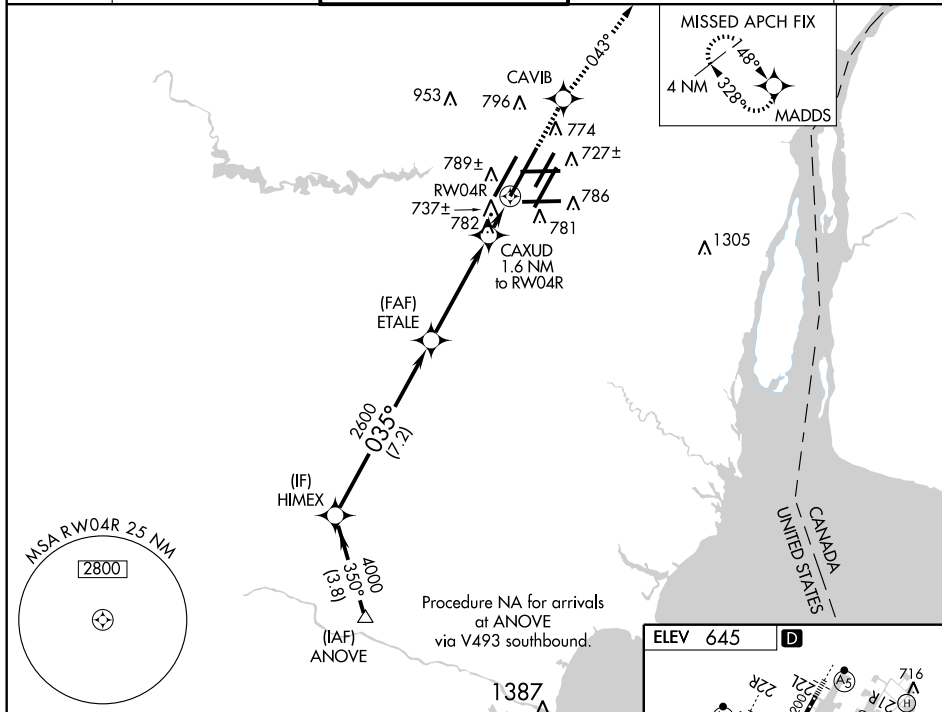
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative ALSF-2, increase LPV all Cats visibility to RVR 5000, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above -47°C (116°F). DME/DME RNP-0.3 NA.

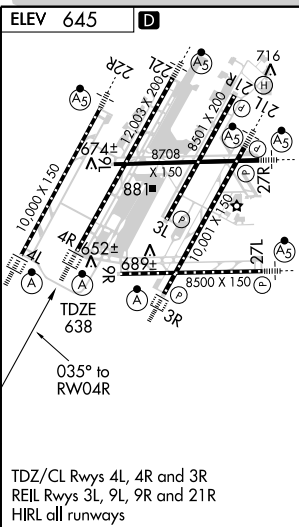


MISSED APPROACH: Climb to 3000 direct CAVIB and via 043° track to MADDS and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



CATEGORY	A	B	C	D
LPV DA		964/24	326 (400-½)	
LNAV/VNAV DA		1015/40	377 (400-¾)	
LNAV MDA	1060/24	422 (500-½)	1060/40 422 (500-¾)	1060/50 422 (500-1)
CIRCLING	1200-1	555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)



WAAS CH 81820 W21A	APP CRS 215°	Rwy Idg 10001 TDZE 632 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 21L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

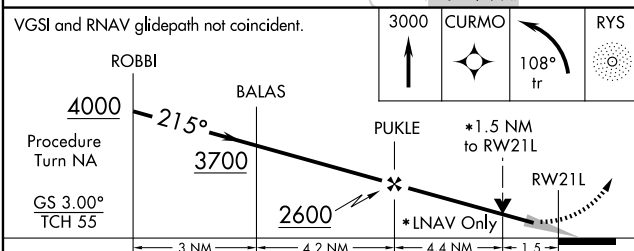
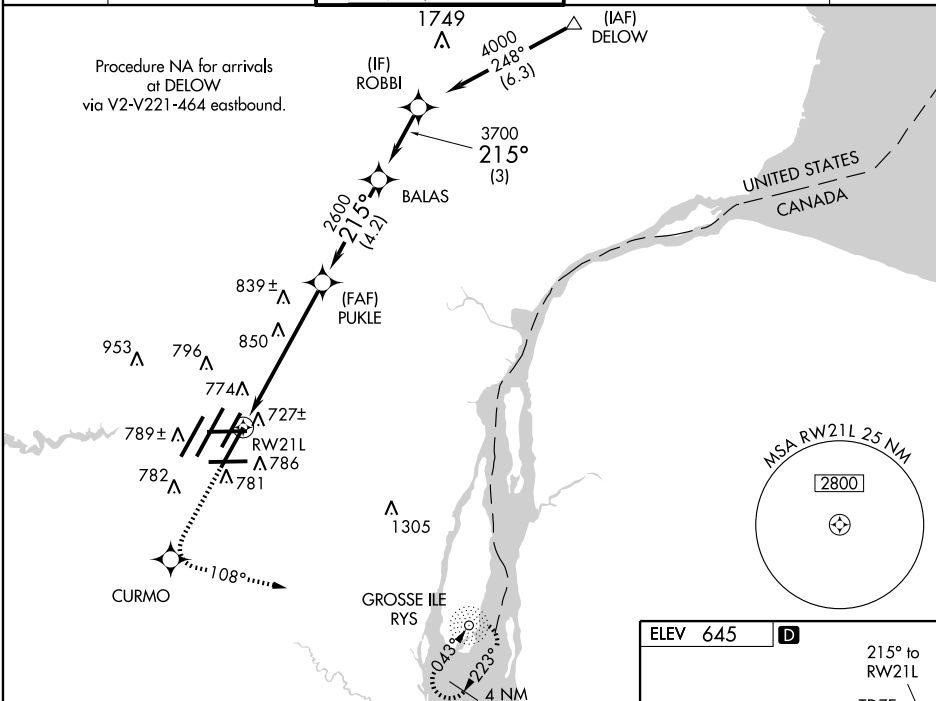
▼ For inoperative MALSRR increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA
below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

MALSRR

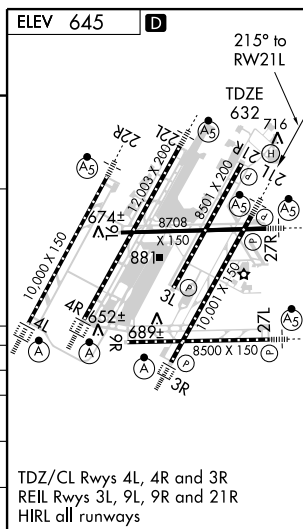


MISSED APPROACH: Climb to
3000 direct CURMO and left turn via
108° track to RYS NDB and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



CATEGORY	A	B	C	D
LPV DA	922/24	290 (300-1/2)		
LNAV/VNAV DA	1118/60	486 (500-1 1/4)		
LNAV MDA	1180/24 548 (600-1/2)	1180/50 548 (600-1)	1180/60 548 (600-1 1/4)	
CIRCLING	1200-1 555 (600-1)	1200-1 1/2 555 (600-1 1/2)	1200-2 555 (600-2)	



WAAS CH 99601 W22A	APP CRS 215°	Rwy Idg 12003 TDZE 637 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 22L

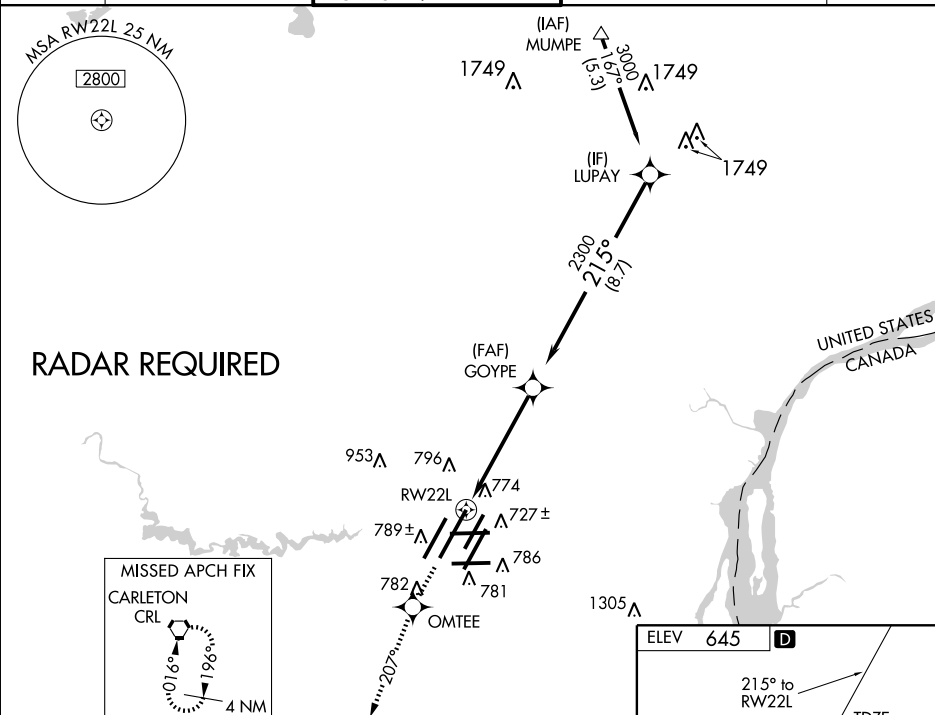
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative MALSR, increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA
below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

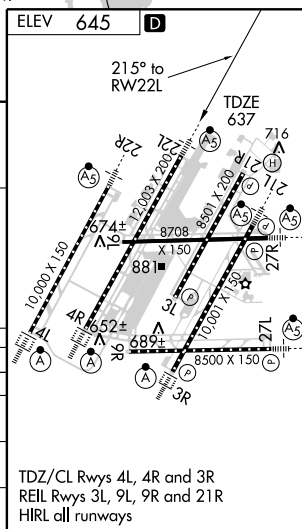


MISSED APPROACH: Climb to 3000
direct OMTEE and via 207° track to
CRL VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



LUPAY				
3000				
GS 3.00° TCH 57				
215°				
2300				
8.7 NM				
3.8 NM				
1.2				
CATEGORY	A	B	C	D
LPV DA	932/24		295 (300-½)	
LNAV/VNAV DA	1117/60		480 (500-1¼)	
LNAV MDA	1080/24 443 (500-½)		1080/40 443 (500-¾)	
CIRCLING	1200-1 555 (600-1)		1200-2 555 (600-2)	



WAAS CH 82001 W22B	APP CRS 215°	Rwy Idg 10000 TDZE 642 Apt Elev 645
--	------------------------	--

RNAV (GPS) RWY 22R

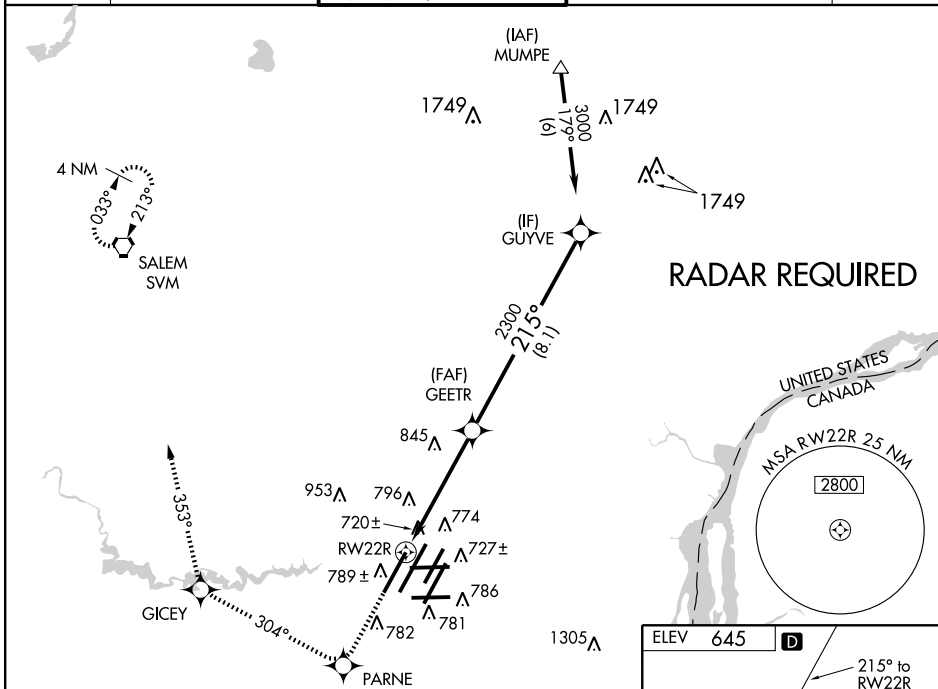
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative MALS, increase LPV all Cats visibility to RVR 5000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA
below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 3000 direct
PARNE and via 304° track to GICEY and
via 353° track to SVM VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



CATEGORY		A	B	C	D
LPV	DA	892/24 250 (300-½)			
LNAV/ VNAV	DA	1006/40 364 (400-¾)			
LNAV	MDA	1160/24 518 (600-½)	1160/50 518 (600-1)	1160/60 518 (600-1½)	
CIRCLING		1200-1 555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)	

WAAS CH 53300 W27B	APP CRS 275°	Rwy Idg TDZE 630 Apt Elev 645	8500
--	------------------------	---	-------------

RNAV (GPS) RWY 27L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

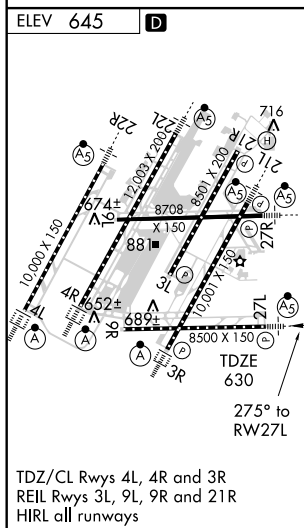
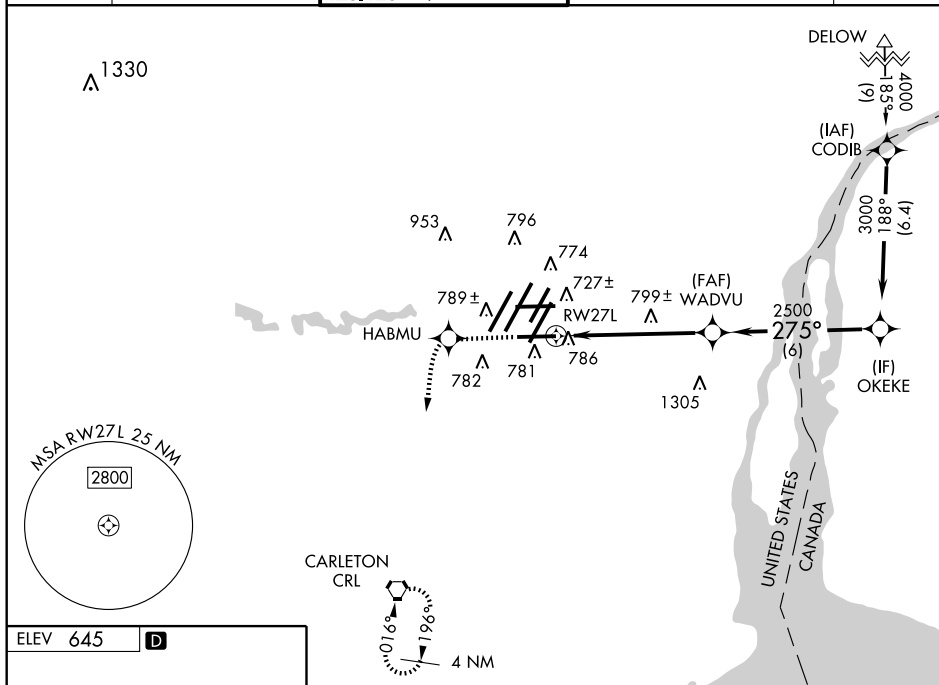
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). DME/DME RNP-0.3 NA.
For inoperative MALSR increase LPV visibility to RVR 5000 all Cats.

MALSR



MISSED APPROACH: Climb to 3000
direct HABMU and via 198° track to
CRL VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
133.675	124.05 363.2 (WEST) 125.15 363.2 (EAST)	135.0 (Rwy 4R/22L) 287.1 118.4 (Rwy 21L/3R) 287.1 128.125 (Rwy 4L/22R) 287.1	121.8 (NW) 119.45 (NE) 132.72 (SW) 119.25 (SE)	120.65



3000	HABMU	CRL	OKEKE	Procedure Turn NA
↑	tr 198°			
	* 1.1 NM to RW27L			
	RW27L			
	* LNAV only			
	1.1	4.5 NM	6 NM	
				VGSI and RNAV glidepath not coincident.
				GS 3.00° TCH 56
CATEGORY	A	B	C	D
LPV DA	930/24		299 (300-½)	
LNAV/VNAV DA	1040/50		410 (400-1)	
LNAV MDA	1060/24	430 (500-½)	1060/40 430 (500-¾)	1060/50 430 (500-1)
CIRCLING	1200-1½		555 (600-1½)	
			1200-2 555 (600-2)	

WAAS CH 86220 W27A	APP CRS 275°	Rwy Idg 8708 TDZE 635 Apt Elev 645
--	------------------------	---

RNAV (GPS) RWY 27R
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

T Baro-VNAV NA below -16°C (4°F). DME/DME RNP-0.3 NA
For inoperative MALS/R, increase LPV visibility to RVR 6000
all Cats, LNAV Cat D visibility to RVR 6000.

MALSR



MISSED APPROACH: Climb to 3000
direct FELON and via 330° track to
SVM VORTAC and hold.

ATIS
133.675

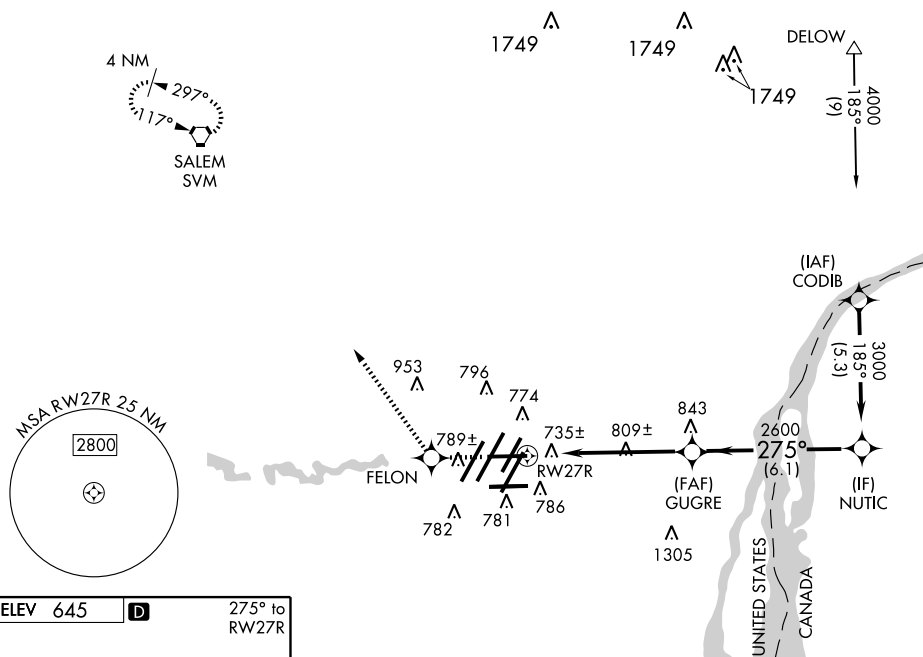
DETROIT APP CON
124.05 363.2 (WEST)
125.15 363.2 (EAST)

METRO TOWER		
135.0	(Rwy 4R/22L)	287.1
118.4	(Rwy 21L/3R)	287.1
128.125	(Rwy 4L/22R)	287.1

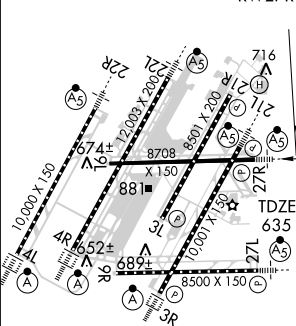
GND CON

121.8 (NW)	119.45 (NE)
132.72 (SW)	119.25 (SE)



CLNC DEL
120.65

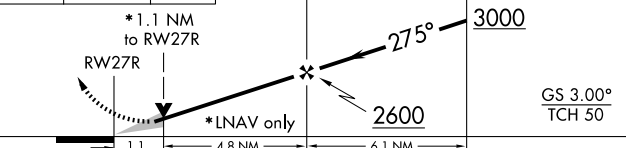


ELEV 645	D	275° to RW27R
----------	----------	------------------



TDZ/CL Rwy 4L, 4R and 3R
REIL Rwy 3L, 9L, 9R and 21R
HIRL all runways

3000 ↑	FELON  tr 330°	SVM 	VGSI and RNAV glidepath not coincident. GUGRE	NUTIC	Procedure Turn NA
-----------	---	--	---	-------	----------------------



CATEGORY	A	B	C	D
LPV DA	970/40		335 (400-¾)	
LNAV/VNAV DA	1040/50		405 (400-1)	
LNAV MDA	1060/24	425 (500-½)	1060/40 425 (500-¾)	1060/50 425 (500-1)
CIRCLING	1200-1½ 555 (600-1½)			1200-2 555 (600-2)

DETROIT, MICHIGAN
Amdt 1 10210

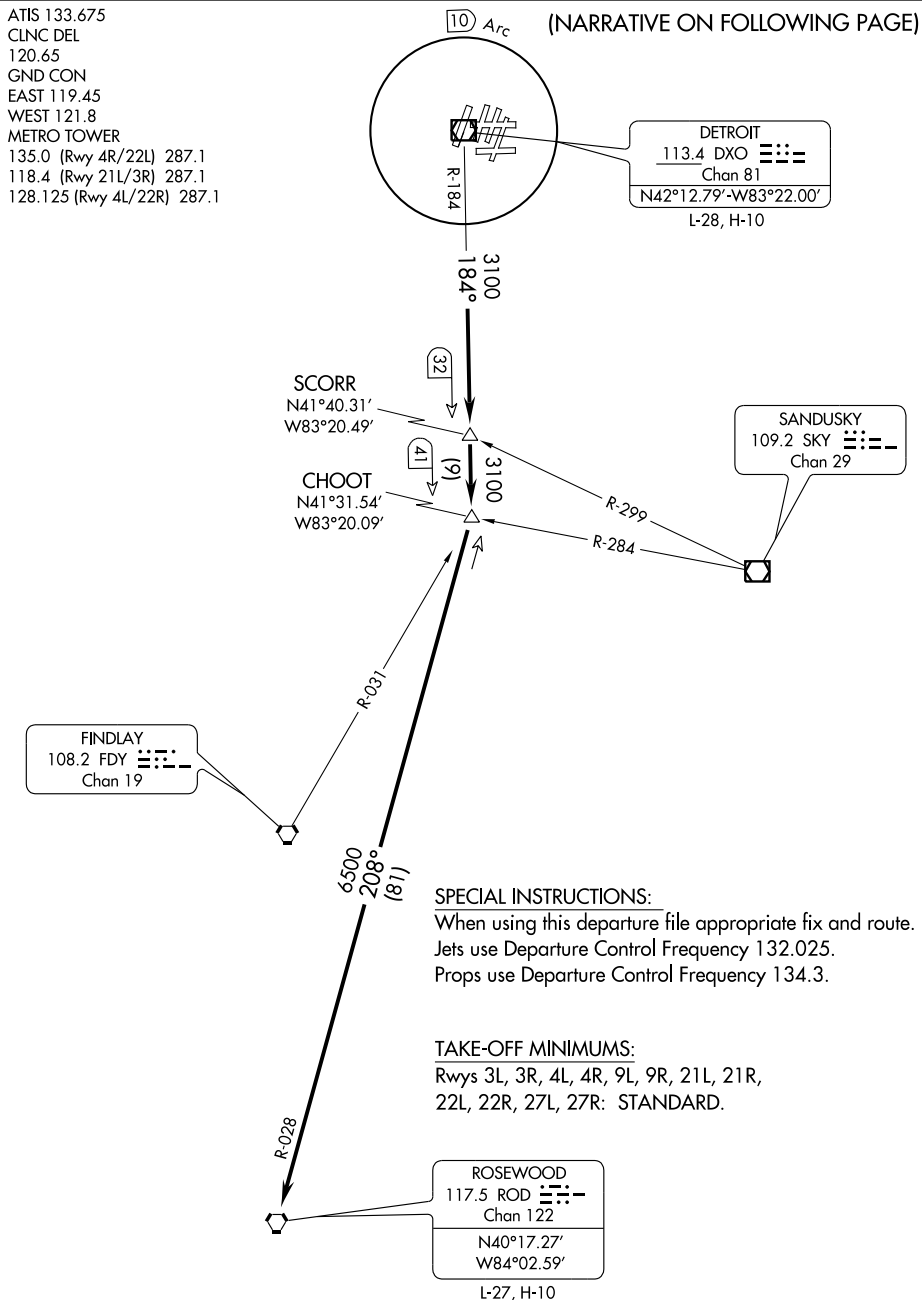
DETROIT METROPOLITAN WAYNE COUNTY (DTW)
42°13'N - 83°21'W **RNAV (GPS) RWY 27R**

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ATIS 133.675
 CLNC DEL
 120.65
 GND CON
 EAST 119.45
 WEST 121.8
 METRO TOWER
 135.0 (Rwy 4R/22L) 287.1
 118.4 (Rwy 21L/3R) 287.1
 128.125 (Rwy 4L/22R) 287.1

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 10210

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-184 to CHOOT INT/DXO 41 DME (MEA 3100), then right turn to via ROD R-028 to ROD VORTAC (MEA 6500).

Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level 10 minutes after departure.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

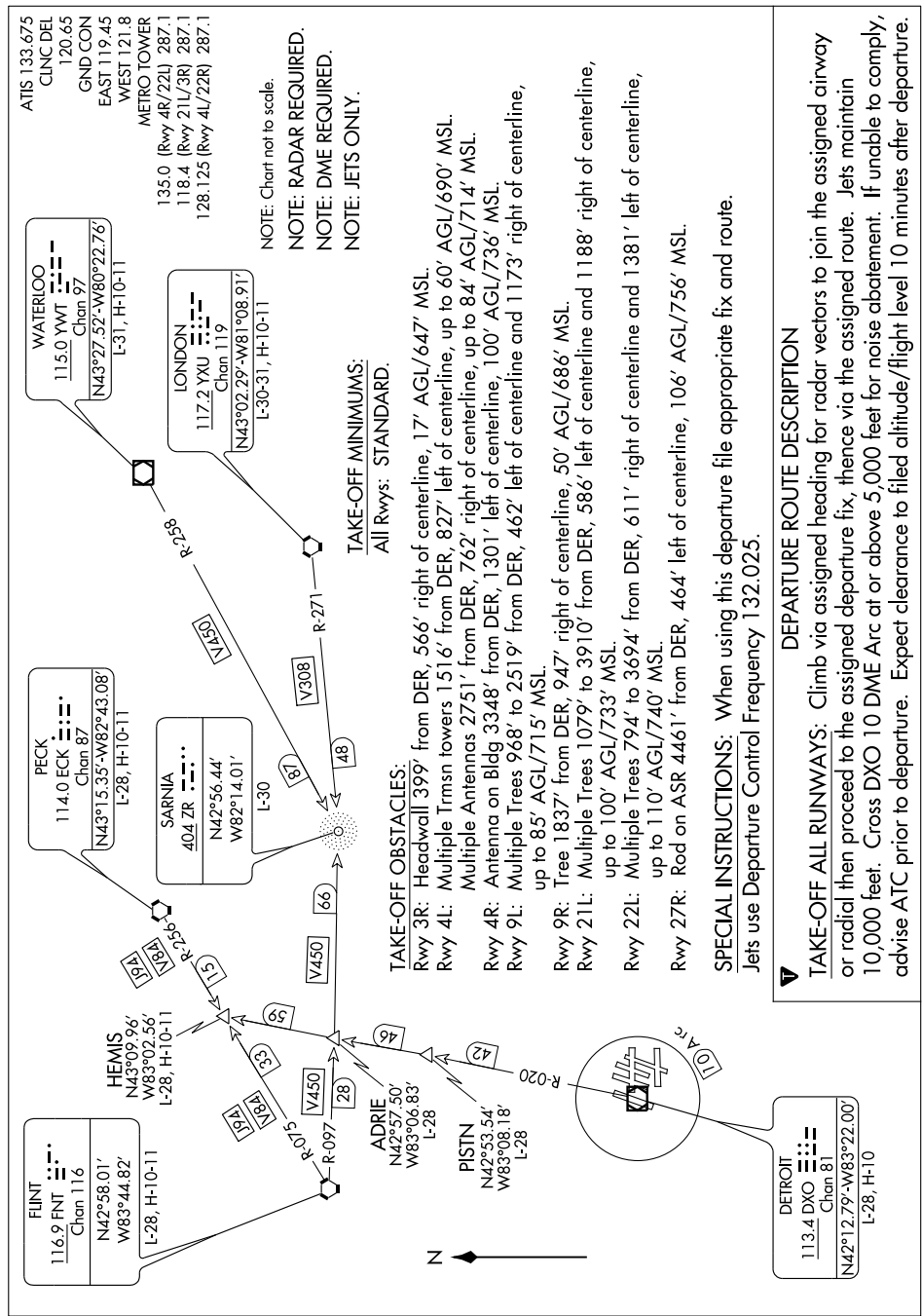
Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010



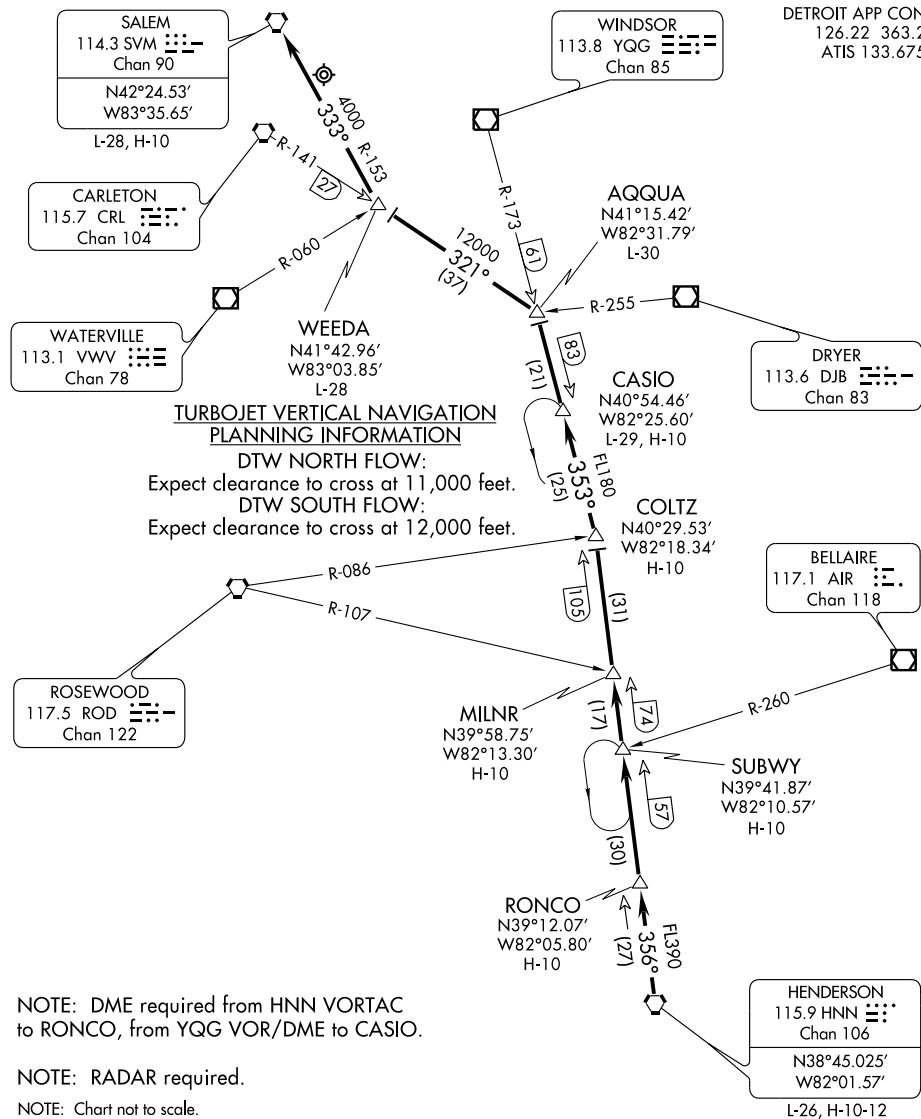
EC-1, 26 AUG 2010 to 23 SEP 2010

WEEDA ONE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY

DETROIT, MICHIGAN

DETROIT APP CON
126.22 363.2
ATIS 133.675

ARRIVAL ROUTE DESCRIPTION

From over HNN VORTAC via R-356 to COLTZ INT (MEA FL390), then via YQG R-173 to AQUA INT (MEA FL180), then via CRL R-141 TO WEEDA INT (MEA 12000) then via SVM R-153 TO SVM VORTAC (MEA 4000). Expect radar vectors to final approach course.

WEEDA ONE ARRIVAL

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY

AIRPORT DIAGRAM

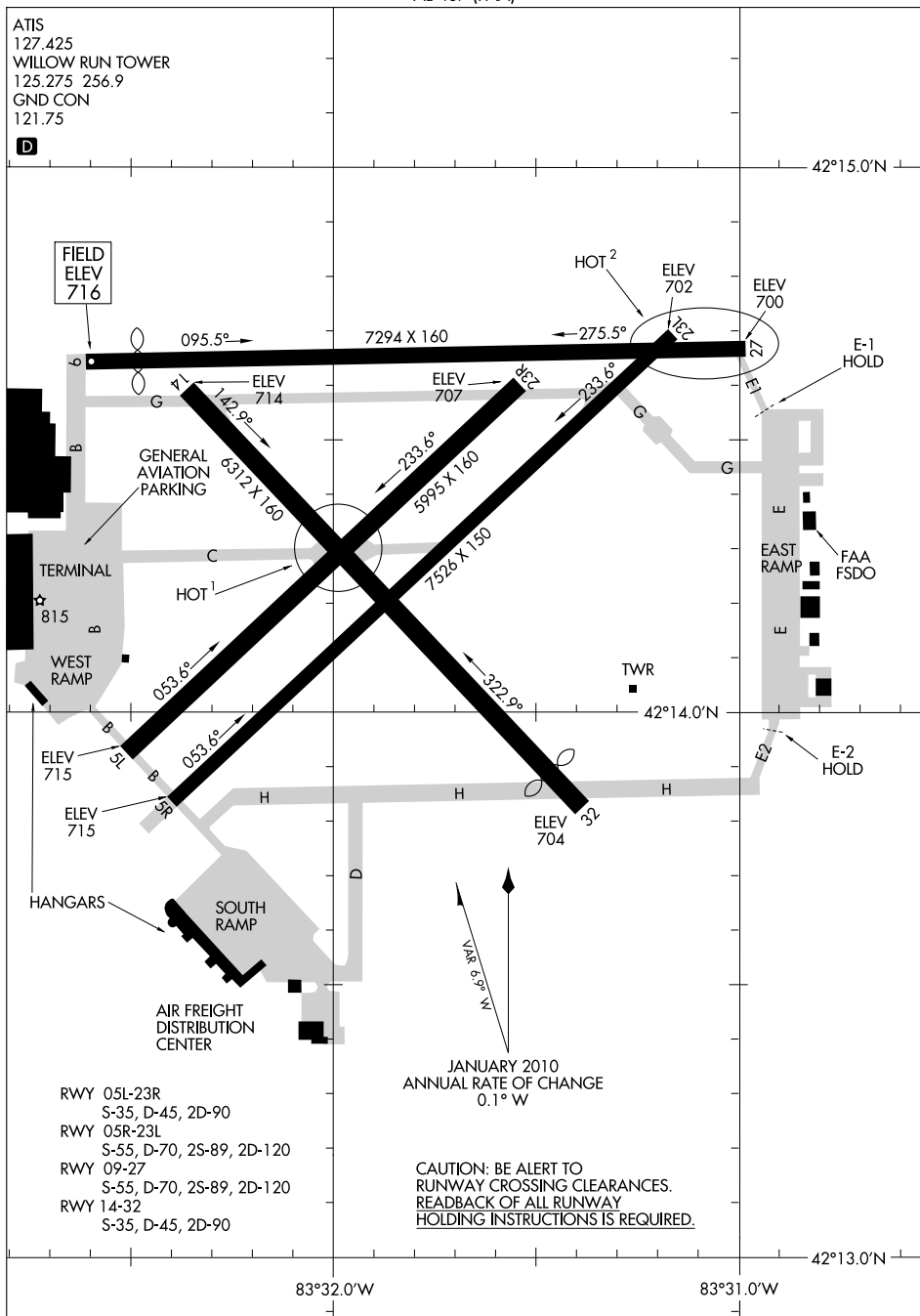
AL-467 (FAA)

DETROIT/WILLOW RUN (YIP)
DETROIT, MICHIGAN

ATIS
127.425
WILLOW RUN TOWER
125.275 256.9
GND CON
121.75

D

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

DETROIT, MICHIGAN
DETROIT/WILLOW RUN (YIP)

CONTINUED FROM PRECEDING PAGE

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 028° 10.9 NM to fld.
629/3W. HIWAS.

(H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' at fld. 638/6W. NOTAM FILE DTW.
DME unusable byd 30 NM below 2900'.

REVUP NDB (LOM) 388 DT N42°07.21' W83°25.90' 038° 6.6 NM to fld. Unmonitored. SHUTDOWN.

SPENC NDB (LOM) 223 DM N42°13.20' W83°12.20' 272° 6.7 NM to fld.

ILS/DME 111.95 I-HJT Chan 56Y Rwy 04L. Class IIE. DME also serves Rwy 22R.

ILS/DME 110.7 I-DTW Chan 44 Rwy 04R. LOM REVUP NDB. OM unmonitored. LOM SHUTDOWN.

ILS/DME 110.7 I-DWC Chan 44 Rwy 22L. Class IE.

ILS/DME 111.95 I-JKI Chan 56Y Rwy 22R. Class IE. DME also serves Rwy 04R.

ILS/DME 111.5 I-HUU Chan 52 Rwy 03R.

ILS/DME 111.5 I-EJR Chan 52 Rwy 21L.

ILS 108.5 I-DMI Rwy 27R. LOM SPENC NDB.

ILS 110.15 I-EPA Rwy 27L. Class IE.

COMM/NAV/WEATHER REMARKS: Dual VHF communications required for Simultaneous Close Parallel ILS PRM Approaches. Rwy 04L and Rwy 22R Monitor 127.05, Rwy 04R and Rwy 22L Monitor 135.775 and Rwy 03R and Rwy 21L Monitor 128.35.

WILLOW RUN (YIP) 24 SW UTC-5(-4DT) N42°14.36' W83°31.86'

716 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks NOTAM FILE YIP **DETROIT COPTER**

RWY 05R-23L: H7526X150 (ASPH) S-55, D-70, 2S-89, 2D-120 MIRL

H-10G, L-28J, A

RWY 05R: MALSR. Tree.

IAP, AD

RWY 23L: MALSR. VASI(V4L)—GA 3.0° TCH 56'.

RWY 09-27: H7294X160 (ASPH-GRVD) S-55, D-70, 2S-89,
2D-120 MIRL

RWY 09: Thld dispd 574'. Railroad.

RWY 14-32: H6312X160 (ASPH-GRVD) S-35, D-45, 2D-90 MIRL

RWY 14: Antenna.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 45'. Thld dispd 525'.
Ground.

RWY 05L-23R: H5995X160 (ASPH-GRVD) S-35, D-45, 2D-90
MIRL

RWY 05L: Trees. RWY 23R: Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05L: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

RWY 23R: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

AIRPORT REMARKS: Attended continuously. Helicopter tkr and ldg on the south ramp prohibited, taxi only. Birds on and in/ovf arpt. Rwy 09-27, only the 80' center portion is grvd. Class IV, ARFF Index A. ARFF Index E svc avbl on req call 734-485-6660. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats requiring Index C or greater call arpt manager 734-485-6670. Flight Notification Service (ADCUS) avbl call 734-942-9000. Customs avbl 24 hrs, Mon-Fri and on call from Detroit Metropolitan Wayne Co arpt on weekend. U.S. customs user fee arpt. All billing thru Wayne Co. Arpt Authority; For customs clearance 1 hr minimum advance notification rqr. Pilots must ctc U.S. customs on 313-226-3140. Req for customs svc by FAA flight plan is not accepted. Ldg fee. Ldg fee is based on acft gross weight.

WEATHER DATA SOURCES: ASOS 132.350 (734) 485-9056. LAWRS.

COMMUNICATIONS: ATIS 127.425 (734) 482-6590

(R) DETROIT APP/DEP CON 118.95

TOWER 125.275 GND CON 121.75

RADIO AIDS TO NAVIGATION: NOTAM FILE DTW.

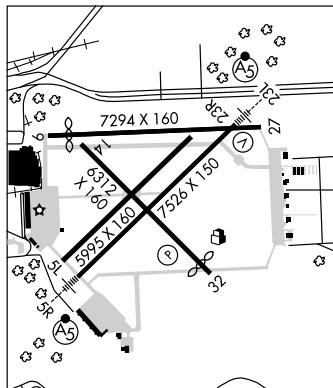
DETROIT (H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' 288° 7.5 NM to fld. 638/6W.

YIPPS NDB (LOM) 359 YI N42°10.45' W83°37.29' 052° 5.6 NM to fld. Unmonitored.

ILS/DME 109.5 I-YIP Chan 32 Rwy 05R. Class IE. LOM YIPPS NDB.

ILS/DME 109.5 I-LSW Chan 32 Rwy 23L. Class IE.

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr.



AKRON TWO DEPARTURE

SL-467 (FAA)

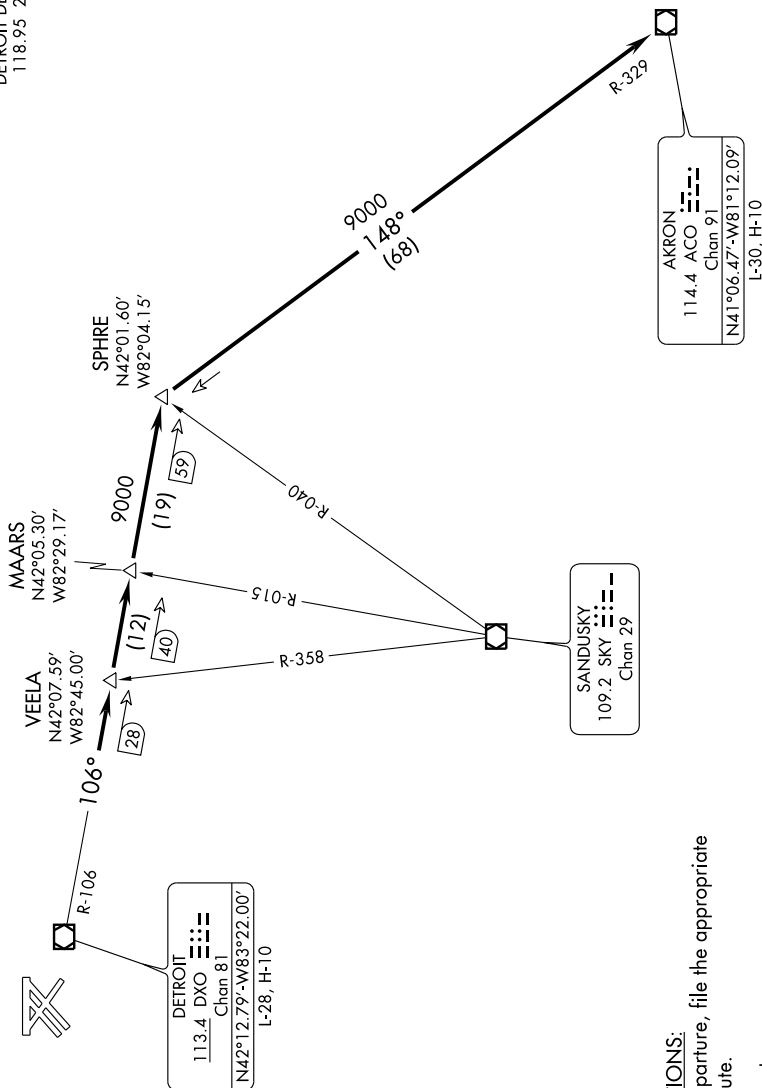
DETROIT/WILLOW RUN (YIP)
DETROIT, MICHIGAN

ATIS 127.425
GND CON
121.75
WILLOW RUN TOWER
125.275 256.9
DETROIT DEP CON
118.95 239.275

TAKE-OFF MINIMUMS

Rwys 5L, 5R, 9, 14, 23L, 23R, 32: Standard.

Rwy 27: 200-1½ or Standard with minimum climb of 206 feet per NM to 1000.



SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.

NOTE: Radar Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010

AKRON TWO DEPARTURE

(ACO2.ACO) 10154

DETROIT, MICHIGAN

DETROIT/WILLOW RUN (YIP)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 5L: Multiple Trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.

Rwy 5R: Multiple Trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.

Rwy 9R: Multiple Trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.

Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.

Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.

Rwy 27L: Multiple Trees and Pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.

Rwy 27: Railroad and Lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.
Tree and Lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.

Rwy 32: Multiple Trees and Poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.
Multiple Trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

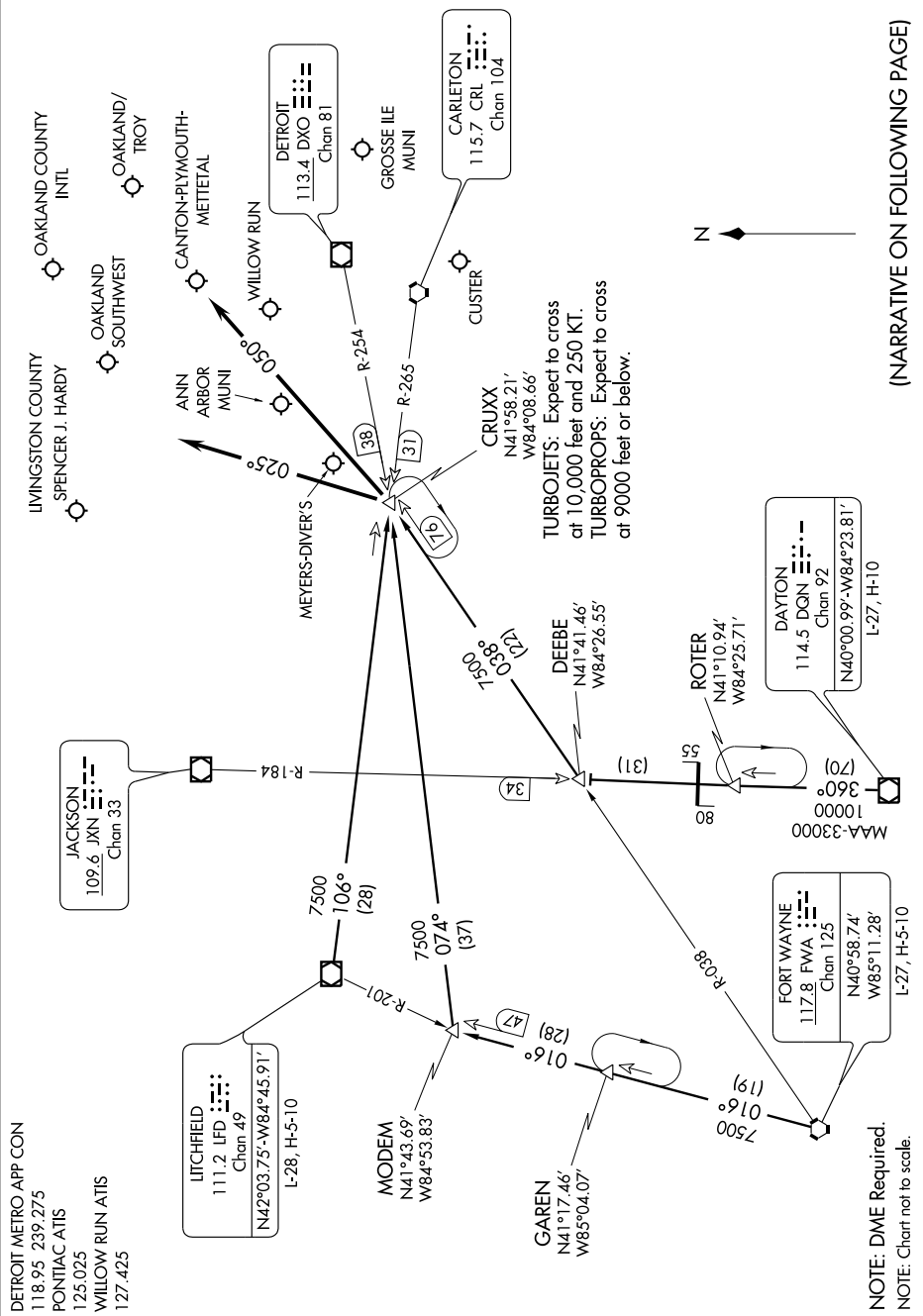
EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

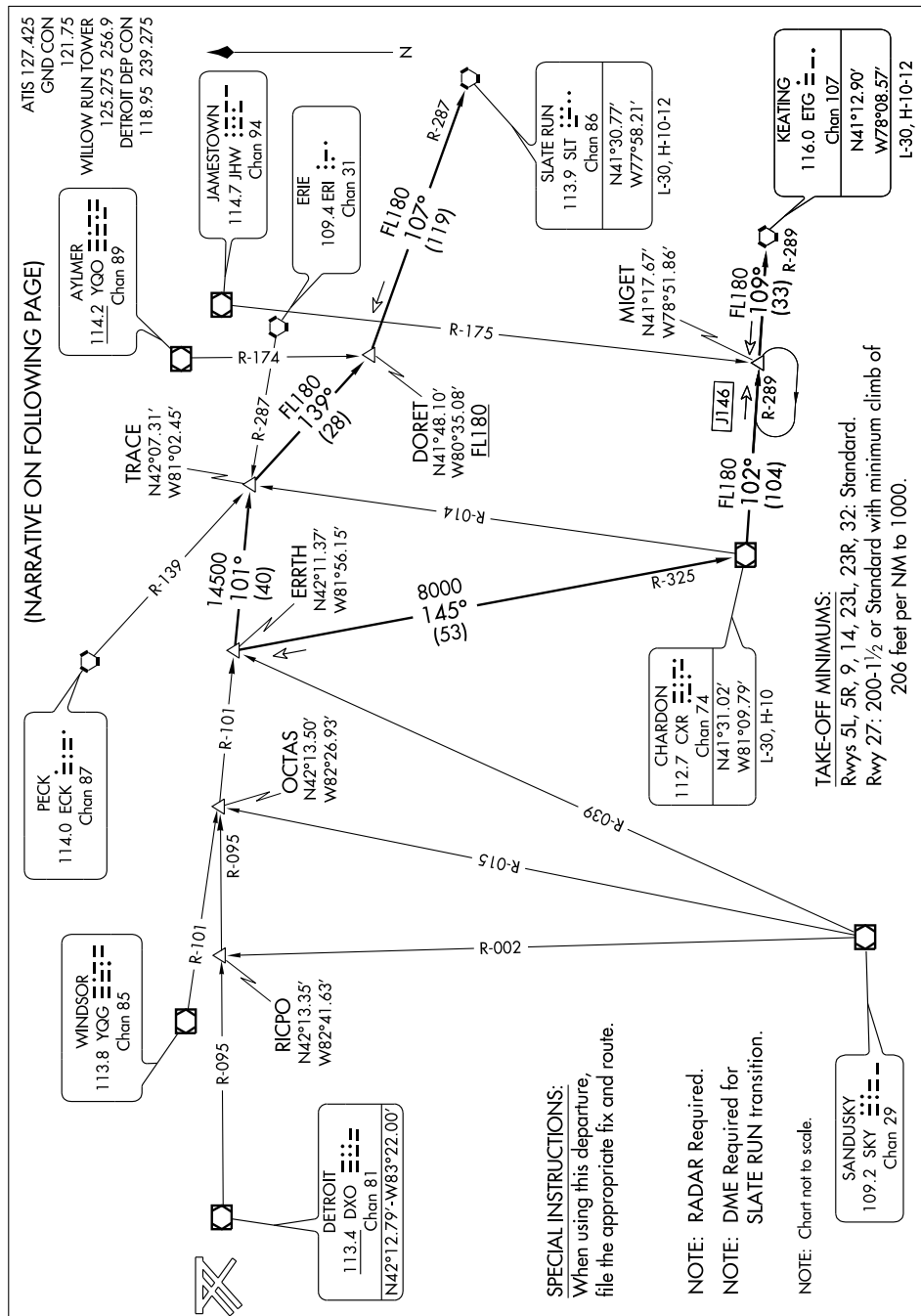
EC-1, 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

SL-467 (FAA)

DETROIT / WILLOW RUN (YIP)

DETROIT, MICHIGAN





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

FORT WAYNE THREE DEPARTURE

SL-467 (FAA)

DETROIT/ WILLOW RUN (YIP)
DETROIT, MICHIGAN

ATIS 127.425
GND CON
121.75
WILLOW RUN TOWER
125.275 256.9
DETROIT DEP CON
118.95 239.275

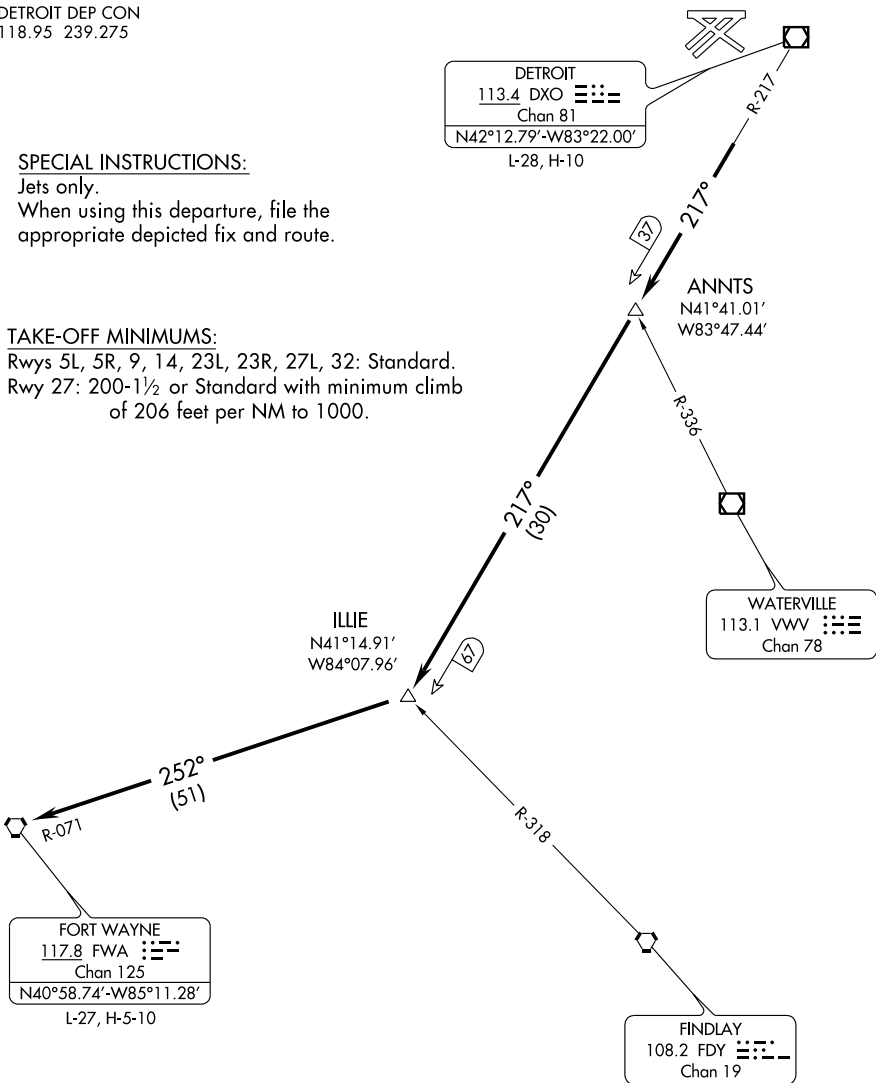
SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the
appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 5L, 5R, 9, 14, 23L, 23R, 27L, 32: Standard.
Rwy 27: 200-1½ or Standard with minimum climb
of 206 feet per NM to 1000.



NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

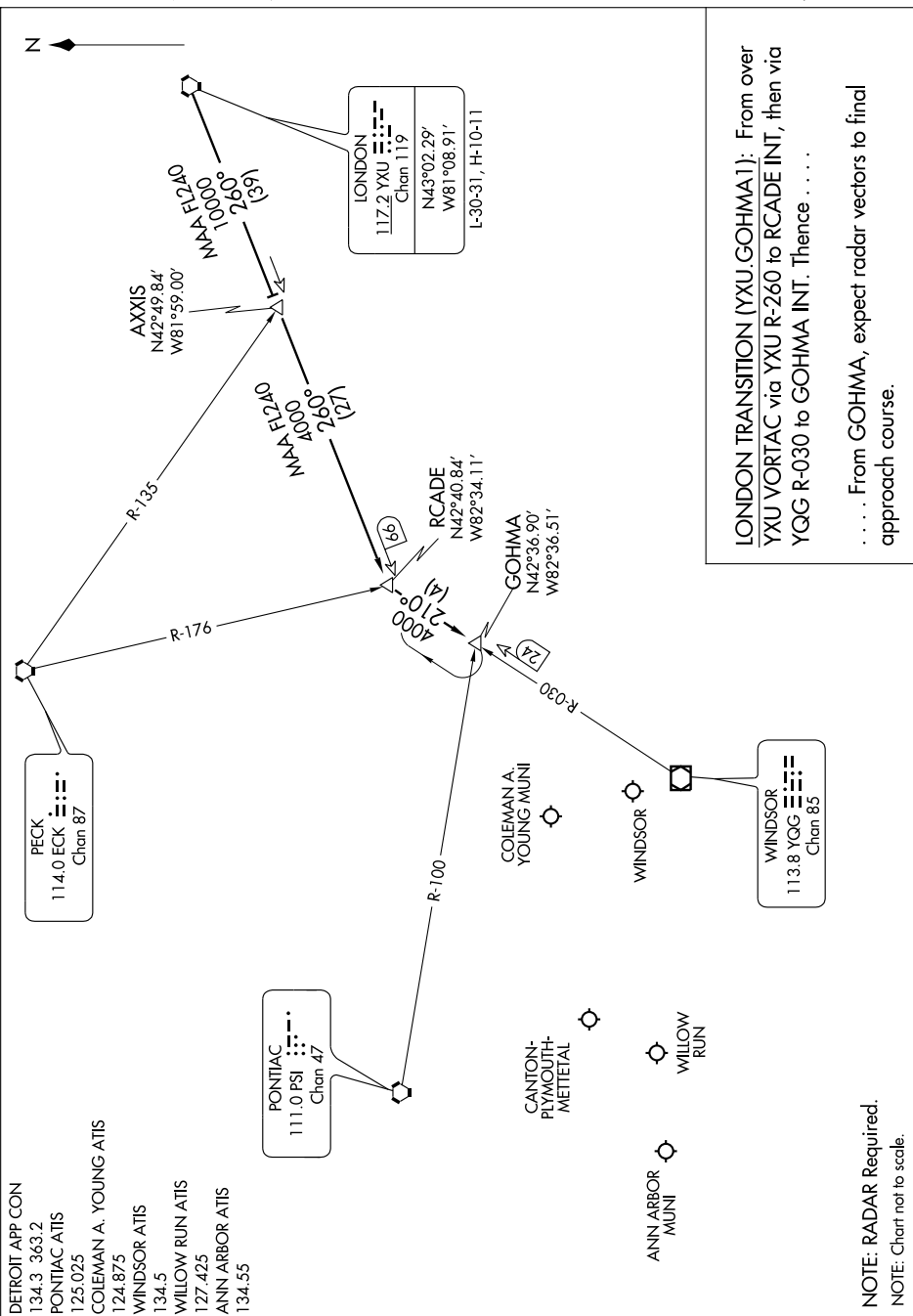
- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1. 26 AUG 2010 to 23 SEP 2010

NOTE: RADAR Required.
NOTE: Chart not to scale.

GOHMA ONE ARRIVAL
(GOHMA.GOHMA1) 09351

DETROIT, MICHIGAN

LOC/DME I-YIP
109.5
Chan **32**

APP CRS
2522

	5R	5L
Rwy Idg	7526	5995
TDZE	715	716
Apt Elev	716	716

ILS or LOC RWY 5R
DETROIT/WILLOW RUN (YIP)

T For inoperative MALSR increase S-LOC-5R Cat A and B; visibility to RVR 5000.
Inoperative table does not apply to S-ILS all cats.

MALSR

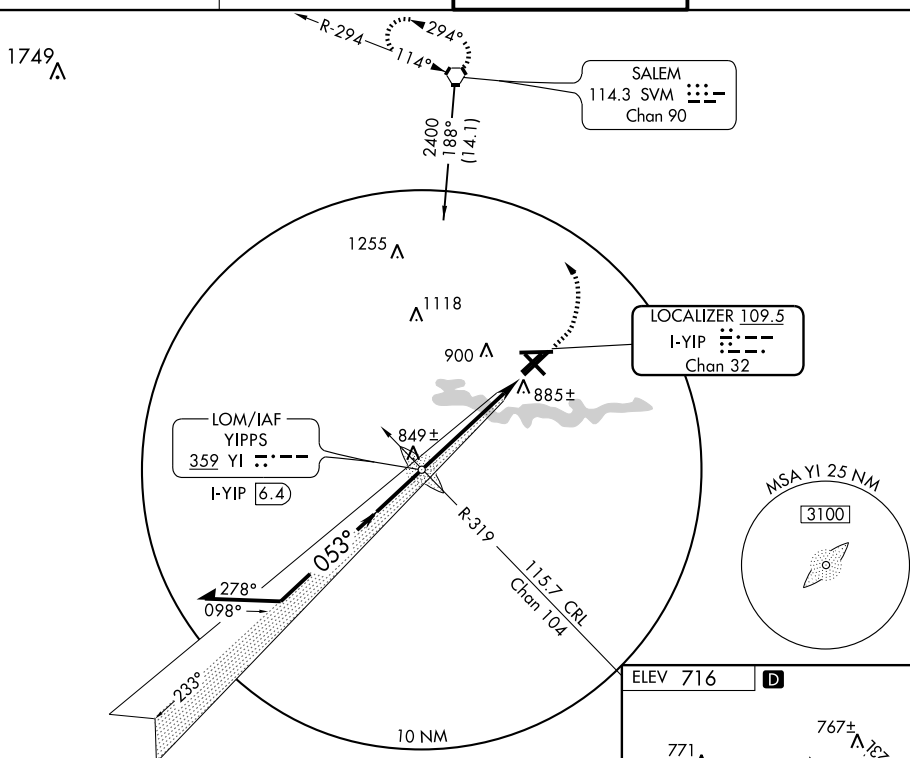
MISSED APPROACH: Climb to 1200, then climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



Remain
within 10 NM

YIPPS LOM/IN
I-YIP 6.4

1200

3000

SVM



2400 5

2400 .

2378

| -Y|P

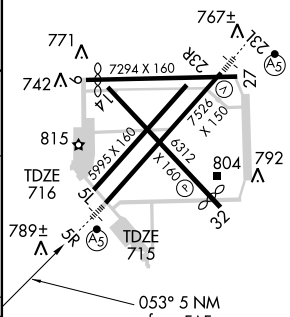
1.4)

1

ELEV 716

MSA YI 25 NM

3100



HIRL Rwy 5R-23L
REIL Rwy 27L and 32
MIRL Rwy 9R-27L, 14-32,
5L-23R, and 9L-27R

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

DETROIT, MICHIGAN
Amdt 15 10154

DETROIT/WILLOW RUN (YIP)
ILS or LOC RWY 5R

42°14'N - 83°32'W


EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

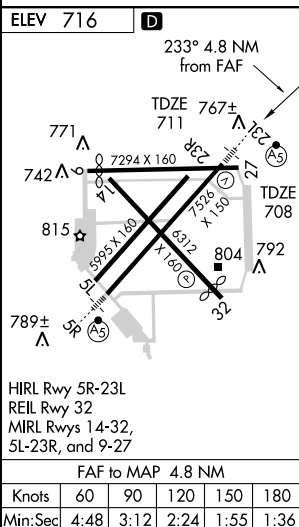
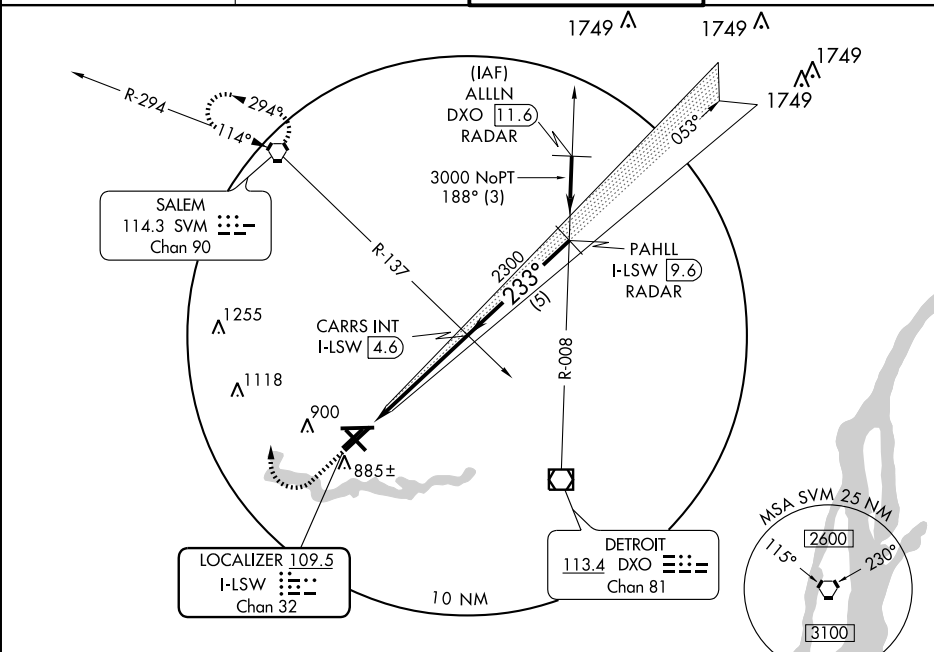
LOC/DME I-LSW	APP CRS	Rwy Idg	7526
109.5	233°	TDZE	708
Chan 32		Apt Elev	716

ILS or LOC RWY 23L

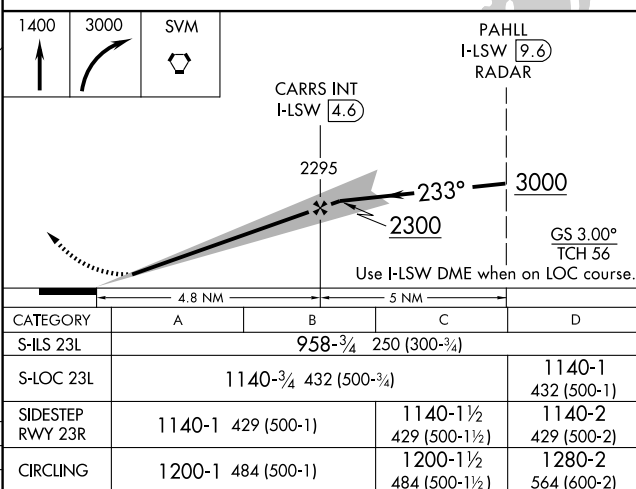
DETROIT/WILLOW RUN (YIP)

<p>▼ Inoperative table does not apply to S-ILS 23L. For inoperative MALSR, increase S-LOC 23 Cat A and B visibility to 1.</p>	<p>MALSR </p>	<p>MISSED APPROACH: Climb to 1400, then climbing right turn to 3000 direct SVM VORTAC and hold.</p>
---	---	---

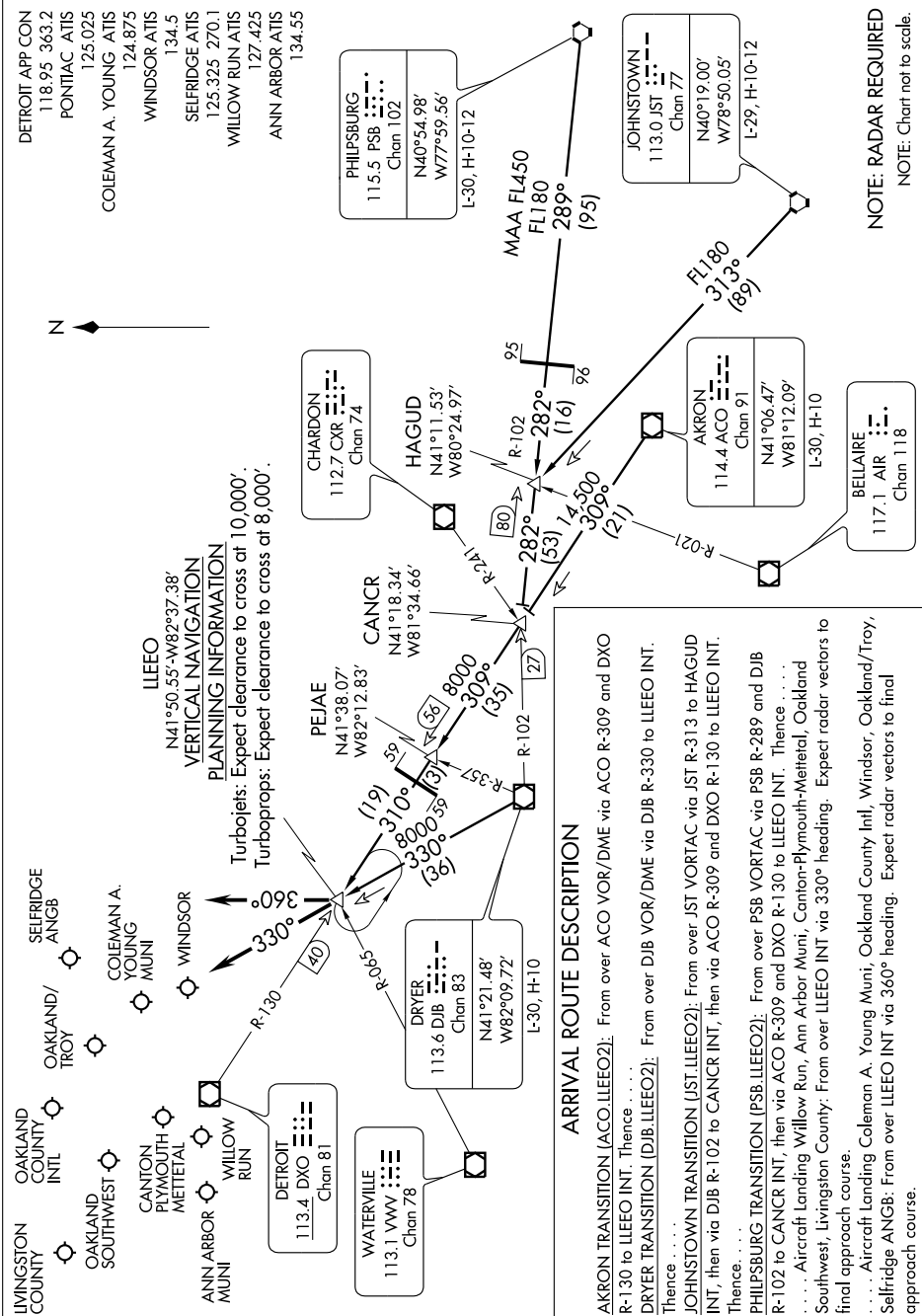
ATIS 127.425	DETROIT APP CON 118.95 363.2	WILLOW RUN TOWER 125.275 256.9	GND CON 121.75
-----------------	---------------------------------	-----------------------------------	-------------------



RADAR REQUIRED



LLEEO TWO ARRIVAL



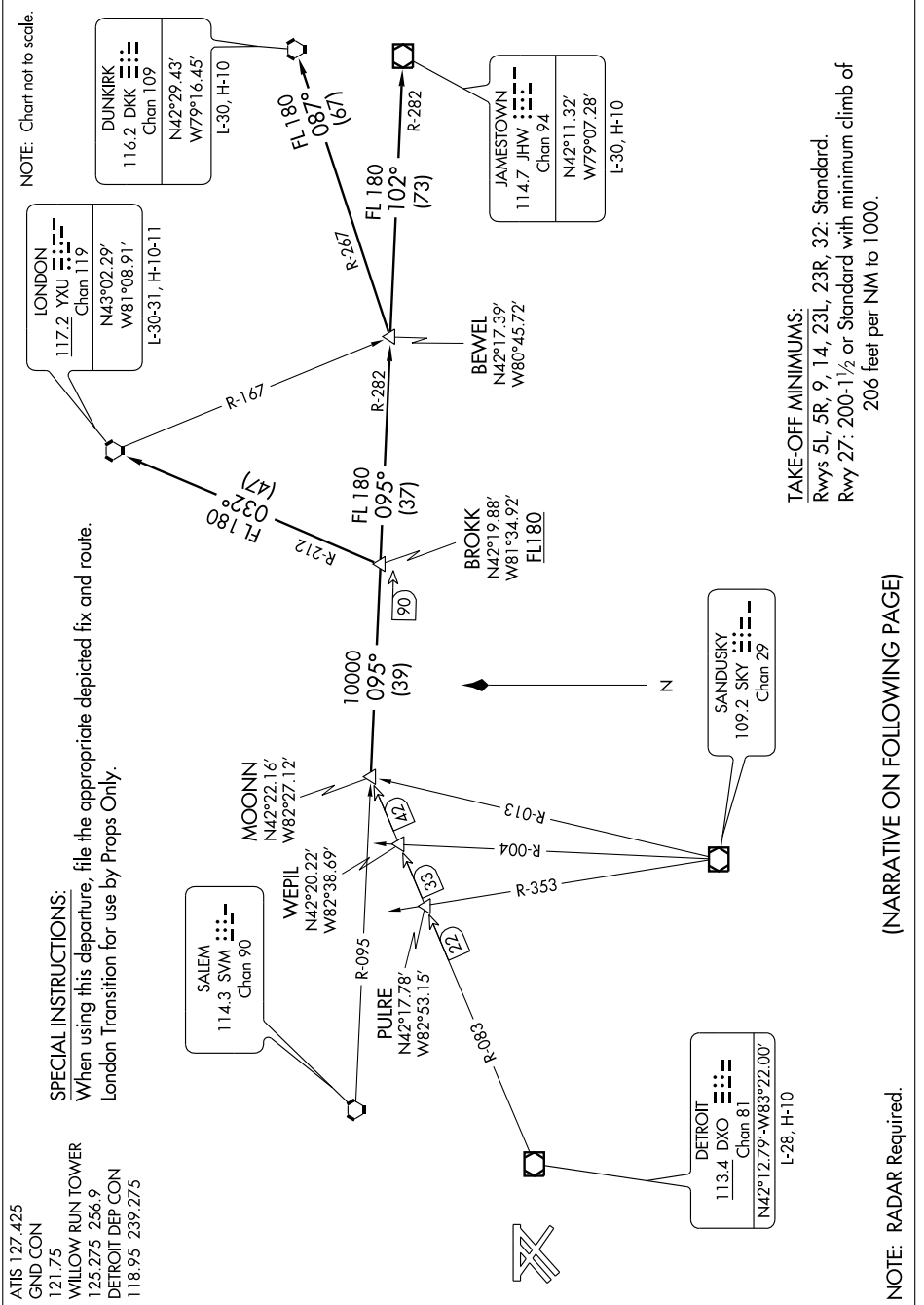
LLEEO TWO ARRIVAL

MOONN TWO DEPARTURE

SL-467 (FAA)

DETROIT /WILLOW RUN (YIP)

DETROIT, MICHIGAN



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

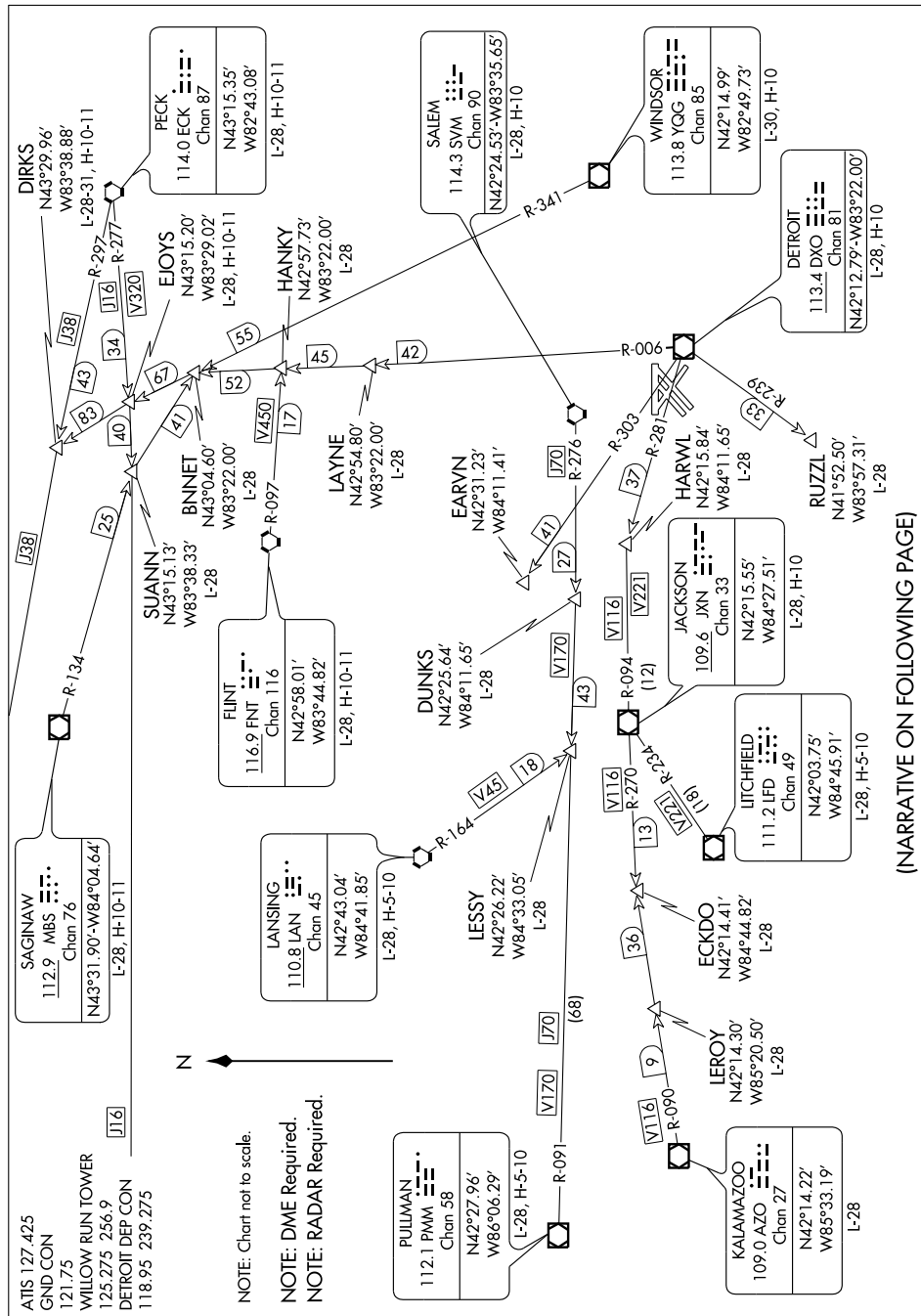
PALACE THREE DEPARTURE

SL-467 (FAA)

DETROIT /WILLOW RUN (YIP)

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010

PALACE THREE DEPARTURE

DETROIT, MICHIGAN

DETROIT /WILLOW RUN (YIP)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF MINIMUMS:

Rwy 5L, 5R, 9, 14, 23L, 23R, 32: Standard.

Rwy 27: 200-1½ or Standard with minimum climb of 206 feet per NM to 1000.

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

ATIS 127.425
GND CON
121.75
WILLOW RUN TOWER
125.275 256.9
DETROIT DEP CON
118.95 239.275



DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10

CAVVS
N41°41.04'
W83°34.14'
L-28

SANDUSKY
109.2 SKY
Chan 29

WATERVILLE
113.1 VWV
Chan 78
N41°27.09'
W83°38.32'
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwy 5L, 5R, 9, 14, 23L, 23R, 32: Standard.

Rwy 27: 200-1½ or Standard with
minimum climb of 206 feet per NM to 1000.

RICHMOND
110.6 RID
Chan 43
N39°45.30' - W84°50.33'
L-27, H-10

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

APP CRS	Rwy Idg	5995
053°	TDZE	716
	Apt Elev	716

RNAV (GPS) RWY 5L

DETROIT/WILLOW RUN (YIP)

T	Circling NA at night to RWY 09L, 14, 23R. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
A NA	Straight-in/Circling NA at night to Rwy 05L.

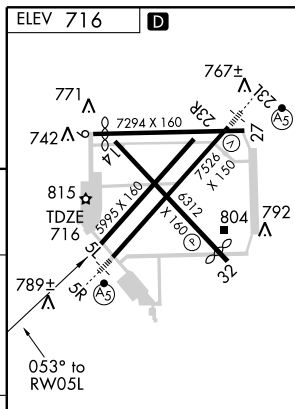
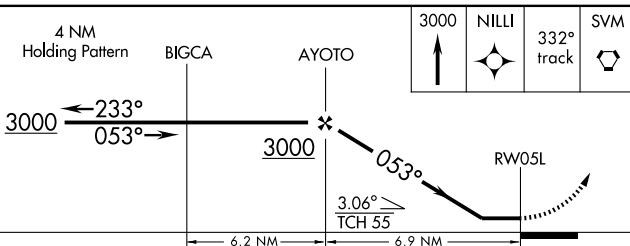
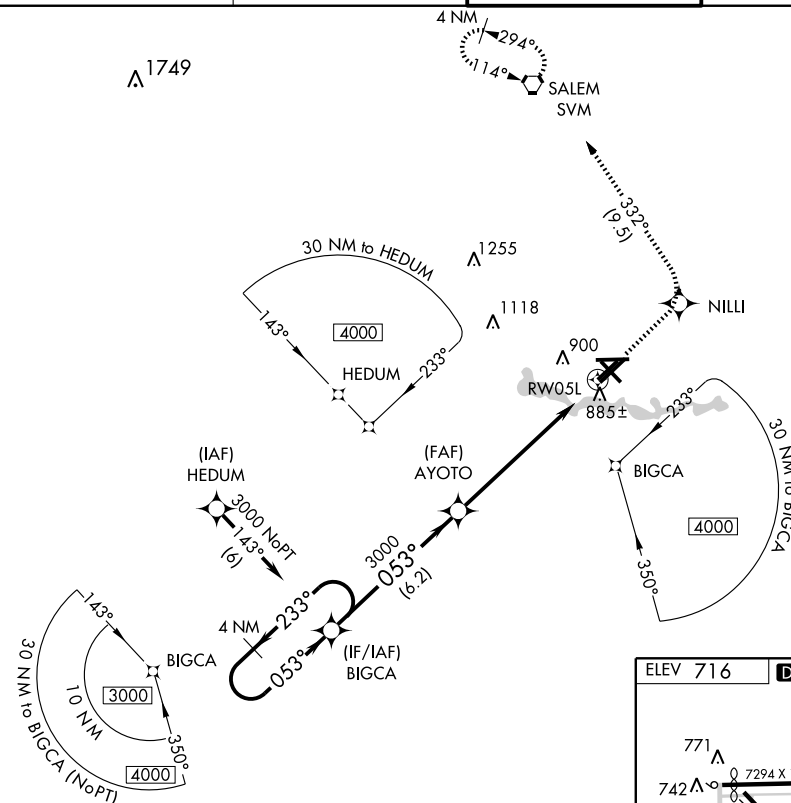
MISSED APPROACH: Climb to 3000 direct NILLI WP and via 332° track to SVM VORTAC and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



CATEGORY	A	B	C	D
LNAV MDA	1240-1	524 (600-1)	1240-1½ 524 (600-1½)	1240-1¾ 524 (600-1¾)
CIRCLING	1240-1	524 (600-1)	1240-1½ 524 (600-1½)	1280-2 564 (600-2)

HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwy 14-32,
5L-23R, and 9-27

APP CRS	Rwy Idg	7526
053°	TDZE	715
	Apt Elev	716

RNAV (GPS) RWY 5R

DETROIT/WILLOW RUN (YIP)



ANA

Circling NA at night to Rwy 5L, 9L, 14, 23R. For inoperative MALSR increase LNAV Cat A/B visibilities to RVR 5000. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (4°F)

MALSRL



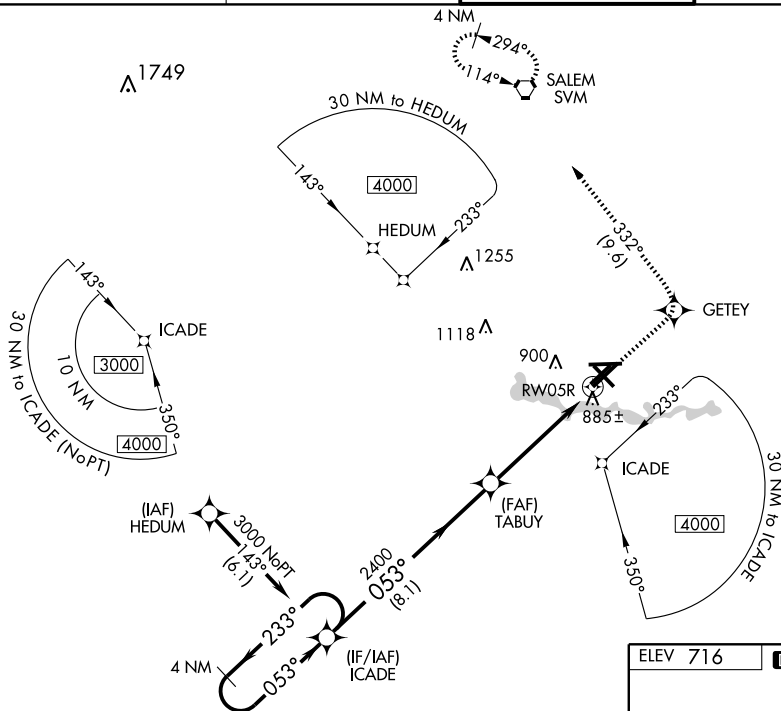
MISSED APPROACH: Climb to 3000
direct GETEY WP and via 332° track
to SVM VORTAC and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

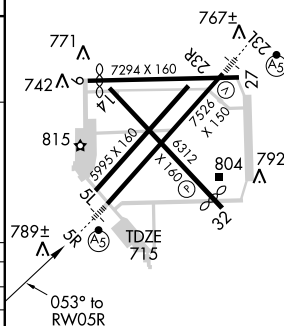
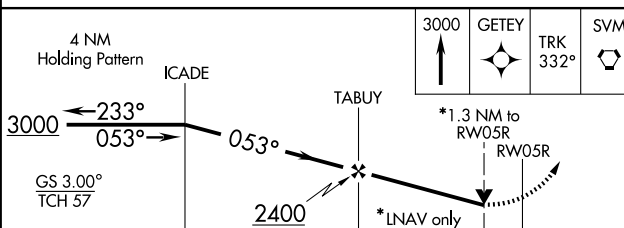
WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



ELEV 716

D



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/ VNAV DA	1200/60 485 (500-1¼)			
LNAV MDA	1200/40 485 (500-¾)			1200/50 485 (500-1)
CIRCLING	1200-1¾ 484 (500-1¾)			1280-2 564 (600-2)

HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwys 14-32,
5L-23R, and 9-27

APP CRS	Rwy Idg	6718
094°	TDZE	715
	Apt Elev	716

RNAV (GPS) RWY 9

DETROIT/WILLOW RUN (YIP)



DME/DME RNP-0.3 NA.
Procedure NA at night.
Visibility reduction by helicopters NA.

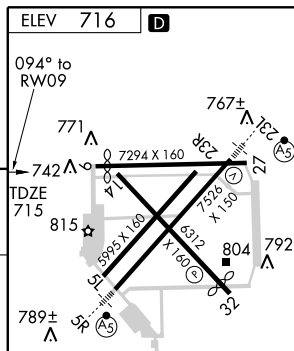
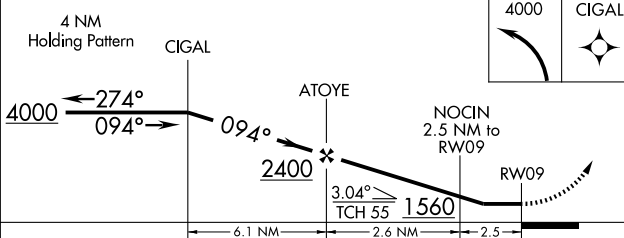
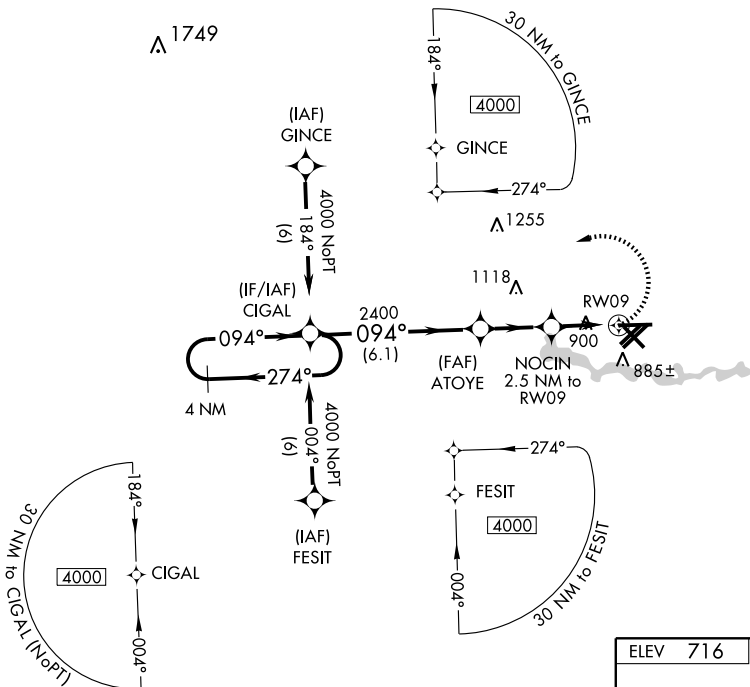
MISSED APPROACH: Climbing left turn to 4000
direct CIGAL and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



CATEGORY	A	B	C	D
RNAV MDA	1160-1	445 (500-1)	1160-1½ 445 (500-1½)	1160-1½ 445 (500-1½)
CIRCLING	1200-1	484 (500-1)	1200-1½ 484 (500-1½)	1280-2 564 (600-2)

HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwys 14-32,
5L-23R, and 9-27

APP CRS	Rwy Idg	6511
094°	TDZE	715
	Apt Elev	716

RNAV (GPS) RWY 9R

DETROIT/WILLOW RUN (YIP)



Circling to Rwy 5L, 9L, 14, 23R NA at night.
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

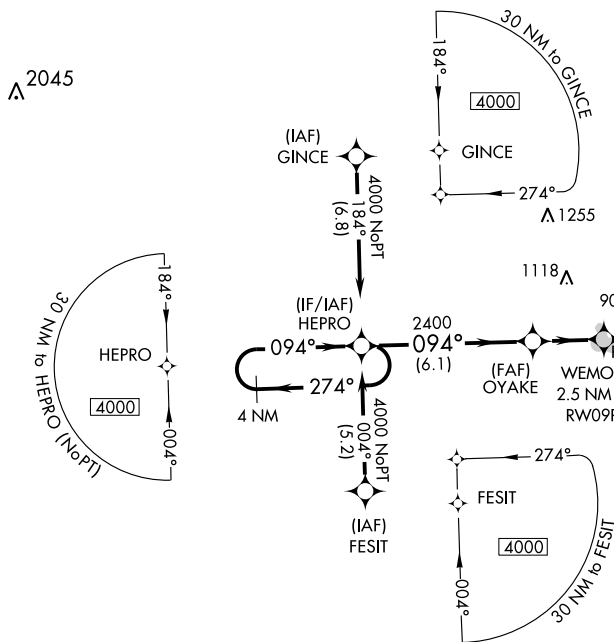
MISSED APPROACH: Climbing right turn to 4000 direct HEPRO and hold.

ATIS
127.42

DETROIT APP CON
118.95 363.2

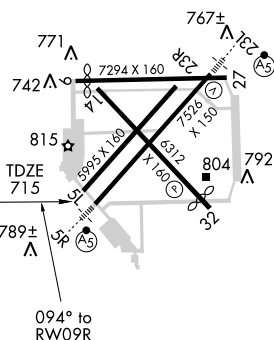
WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



ELEV 716

D



HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwy 14-32,
5L-23R, and 9-27

DETROIT, MICHIGAN

Amdt 1 10154

DETROIT/ WILLOW RUN (YIP)

RNAV (GPS) RWY 9R

42°14'N - 83°32'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

WAAS CH 81910 W23A	APP CRS 233°	Rwy Idg TDZE Apt Elev	7526 708 716
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 23L

DETROIT/ WILLOW RUN (YIP)

T Circling to Rwy 5L, 9L, 14, 23R NA at night.
For inoperative MALSR, increase LNAV Cats. A, B, & C visibility to 1 mile, Cat. D to 1½ miles. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MALSR



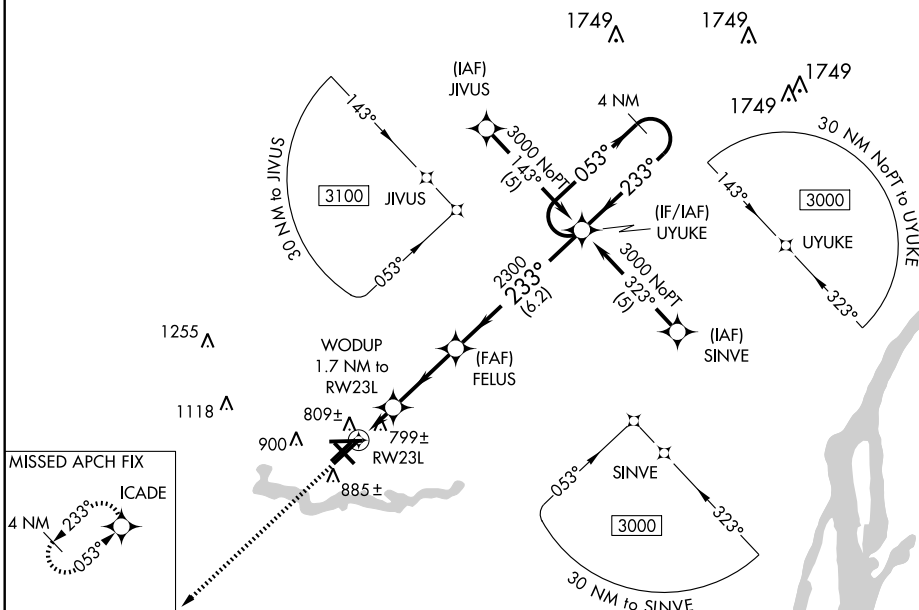
MISSED APPROACH: Climb to 3000
direct ICADE and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

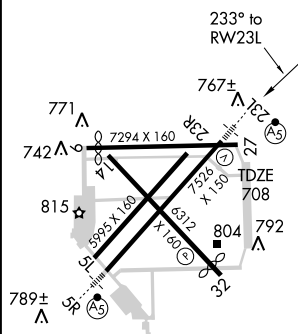
WILLOW RUN TOWER
125.275 256.9

GND CON
121.75

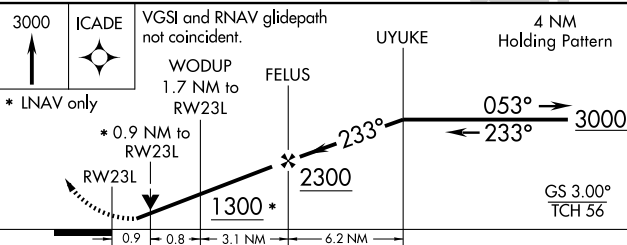


ELEV 716

D



HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwy 14-32,
5L-23R, and 9-27



CATEGORY	A	B	C	D
LPV DA	980- $\frac{3}{4}$ 272 (300- $\frac{3}{4}$)			
LNAV/ VNAV DA	1096- $\frac{3}{4}$ 388 (400- $\frac{3}{4}$)			
LNAV MDA	1060- $\frac{3}{4}$ 352 (400- $\frac{3}{4}$)			1060-1 352 (400-1)
CIRCLING	1200-1 484 (500-1)		1200-1 $\frac{1}{2}$ 484 (500-1 $\frac{1}{2}$)	1280-2 564 (600-2)

DETROIT, MICHIGAN

Amdt 1 10154

DETROIT/ WILLOW RUN (YIP)

42°14'N - 83°32'W

RNAV (GPS) RWY 23L

APP CRS 233°	Rwy Idg 5995 TDZE 711 Apt Elev 716
------------------------	---

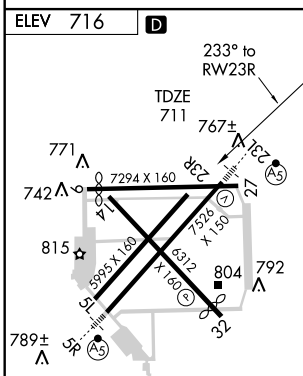
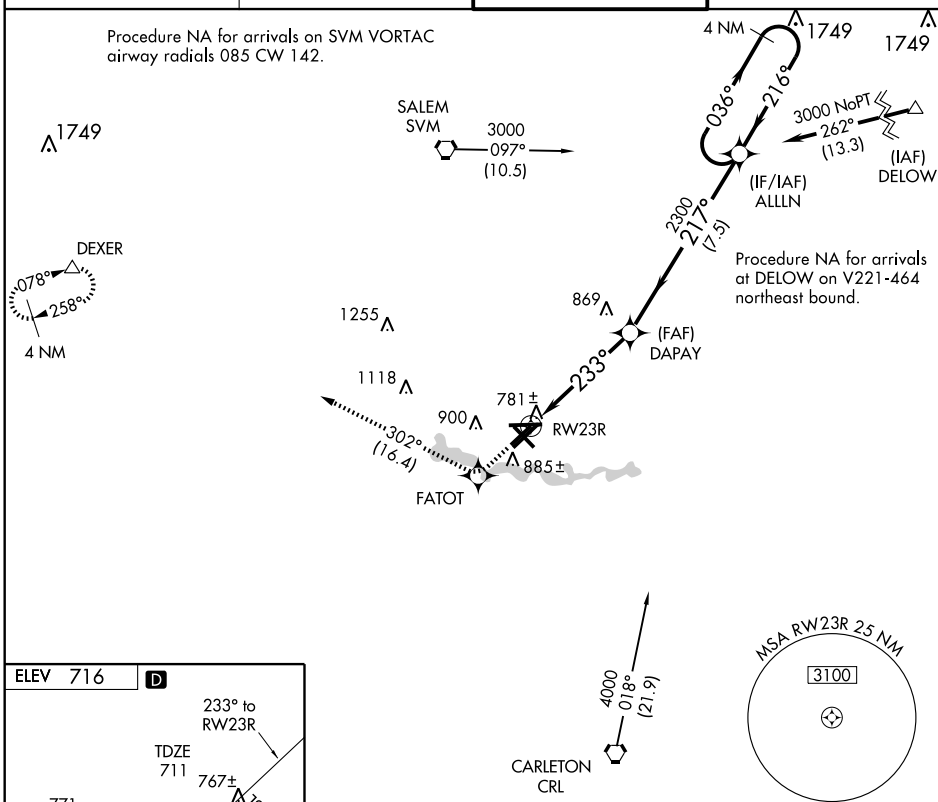
RNAV (GPS) RWY 23R

DETROIT/ WILLOW RUN (YIP)

<p>V DME/DME RNP-0.3 NA.</p> <p>Δ NA Straight-in/Circling to Rwy 23R NA at night.</p> <p>Circling NA at night to Rwy 5L, 9L, 14.</p>	<p>MISSED APPROACH: Climb to 3000 direct FATOT WP and via 302° track to DEXER WP and hold.</p>
--	---

ATIS 127,425	DETROIT APP CON 118.95 363.2	WILLOW RUN TOWER 125,275 256.9	GND CON 121.75
-----------------	---------------------------------	-----------------------------------	-------------------

Procedure NA for arrivals on SVM VORTAC
airway radials 085 CW 142.



HIRL Rwy 5R-23L
REIL Rwy 32
MIRL Rwy 14-32,
51-23R, and 9-27

3000	FATOT	302° track	DEXER					
CATEGORY	A		B		C		D	
LNAV MDA	1120 - 1		409 (500-1)		1120-1¼		409 (500-1¼)	
CIRCLING	1200 - 1		484 (500-1)		1200 - 1½ 484 (500-1½)		1280 - 2 564 (600-2)	

DETROIT, MICHIGAN

Orig-A 10154

DETROIT/ WILLOW RUN (YIP)

42°14'N - 83°32'W

RNAV (GPS) RWY 23R

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

ROSEWOOD TWO DEPARTURE

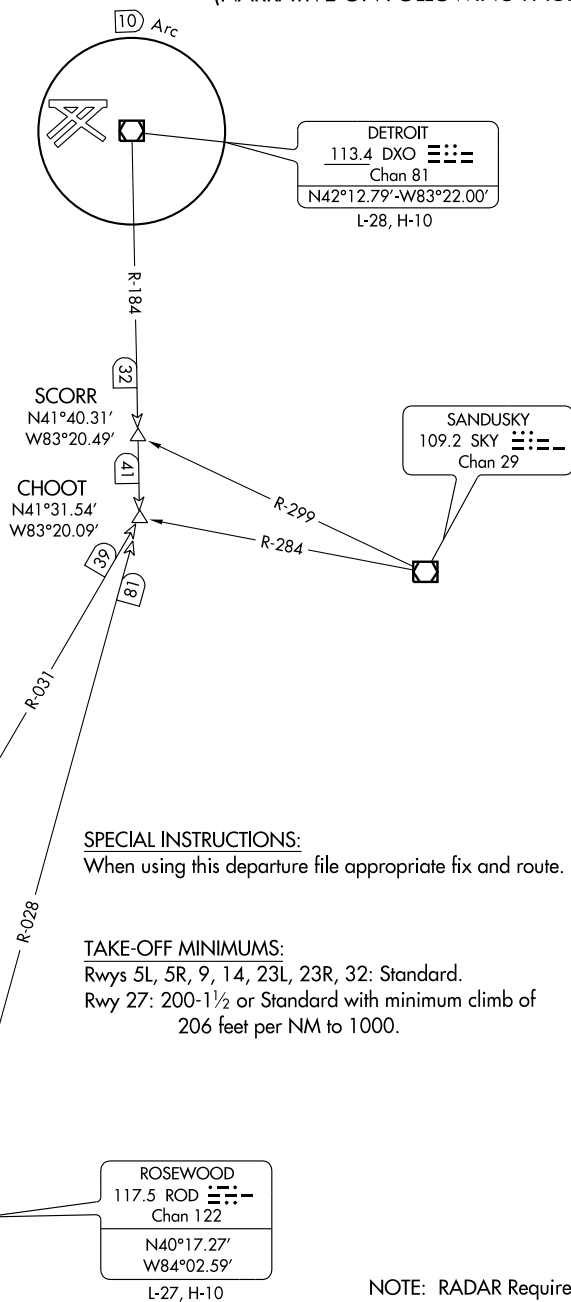
SL-467 (FAA)

DETROIT/ WILLOW RUN (YIP)

DETROIT, MICHIGAN

ATIS 127.425
GND CON
121.75
WILLOW RUN TOWER
125.275 256.9
DETROIT DEP CON
118.95 239.275

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 10154

DETROIT, MICHIGAN

DETROIT/ WILLOW RUN (YIP)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES


- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT APP CON
127.5 239.275
WILLOW RUN ATIS 127.425
PONTIAC ATIS 125.025
COLEMAN A. YOUNG ATIS 124.875
WINDSOR ATIS 134.5
SELFRIDGE ATIS 125.325 270.1

SPRTN
N42°42.52'-W84°00.23'
VERTICAL NAVIGATION
PLANNING INFORMATION
TURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

FLINT
116.9 FNT 
Chan 116

PONTIAC
111.0 PSI
Chan 47

4000
*2900
096
(31

LIVINGSTON COUNTY
SPENCER J. HARDY

PARKY
N42°38.16'
W83°54.57'


OAKLAND COUNTY
INTL

OAKLAND/
TROY

CANTON-
PLYMOUTH-
METTETAL

WINDSOR

ANN ARBOR MUNI

DETROIT
113.4 DXO 
Chan 81

GROSSE ILE
MUNI

MEYERS-DIVER'S

CLUSTER

NOTE: This Star for use at
or above 9,000'.

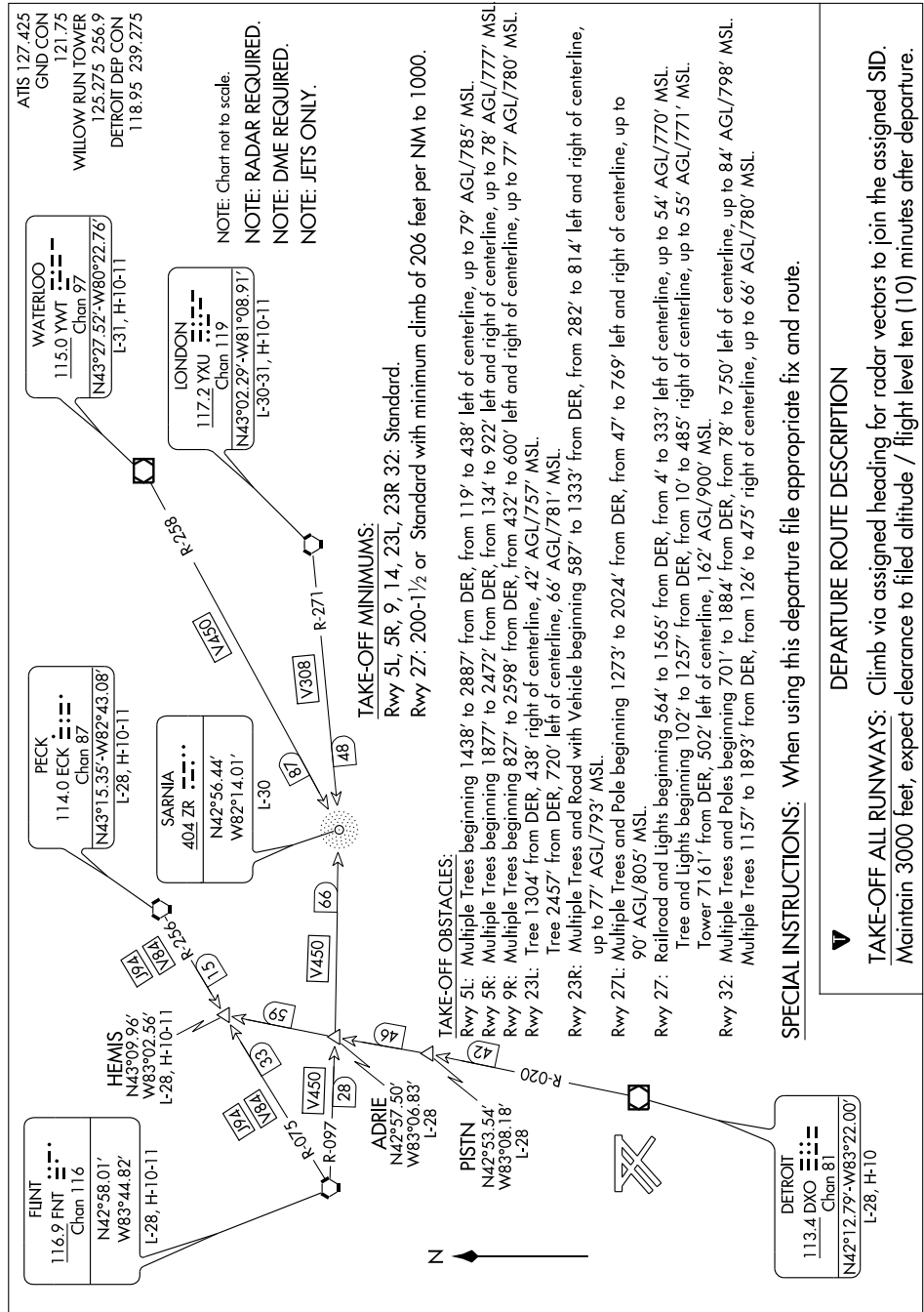
NOTE: Chart not to scale.

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence
 Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence
 Expect radar vectors to final approach course.

(STCLR3.DXO) 10154
ST. CLAIR THREE DEPARTURE

DETROIT/ WILLOW RUN (YIP)
SL-467 (FAA) DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



ST. CLAIR THREE DEPARTURE
(STCLR3.DXO) 10154

DETROIT, MICHIGAN
DETROIT/ WILLOW RUN (YIP)

EC-1, 26 AUG 2010 to 23 SEP 2010

VORTAC SVM 114.3 Chan 90	APP CRS 164°	Rwy Idg TDZE Apt Elev N/A N/A 716
--	------------------------	---

VOR or GPS-A

DETROIT/WILLOW RUN (YIP)



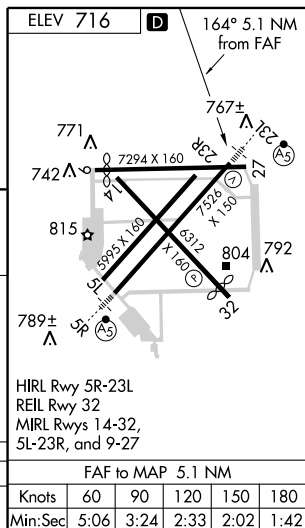
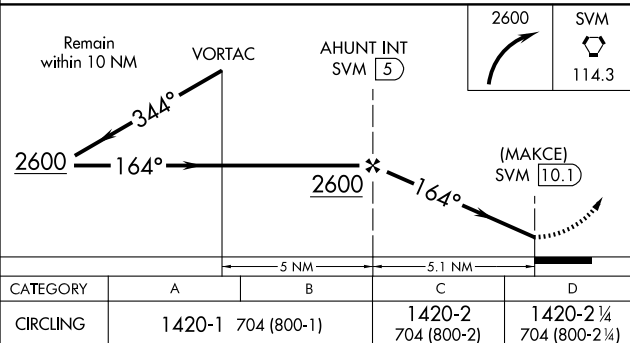
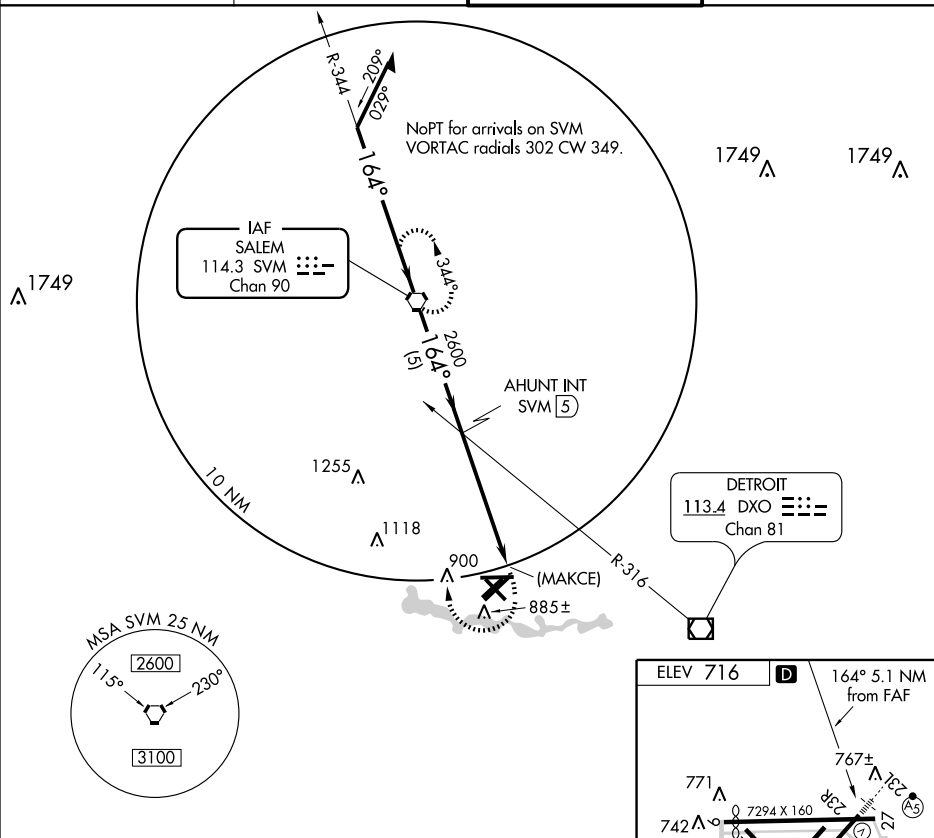
MISSED APPROACH: Climbing right turn to 2600 direct SVM VORTAC and hold.

ATIS
127.425

DETROIT APP CON
118.95 363.2

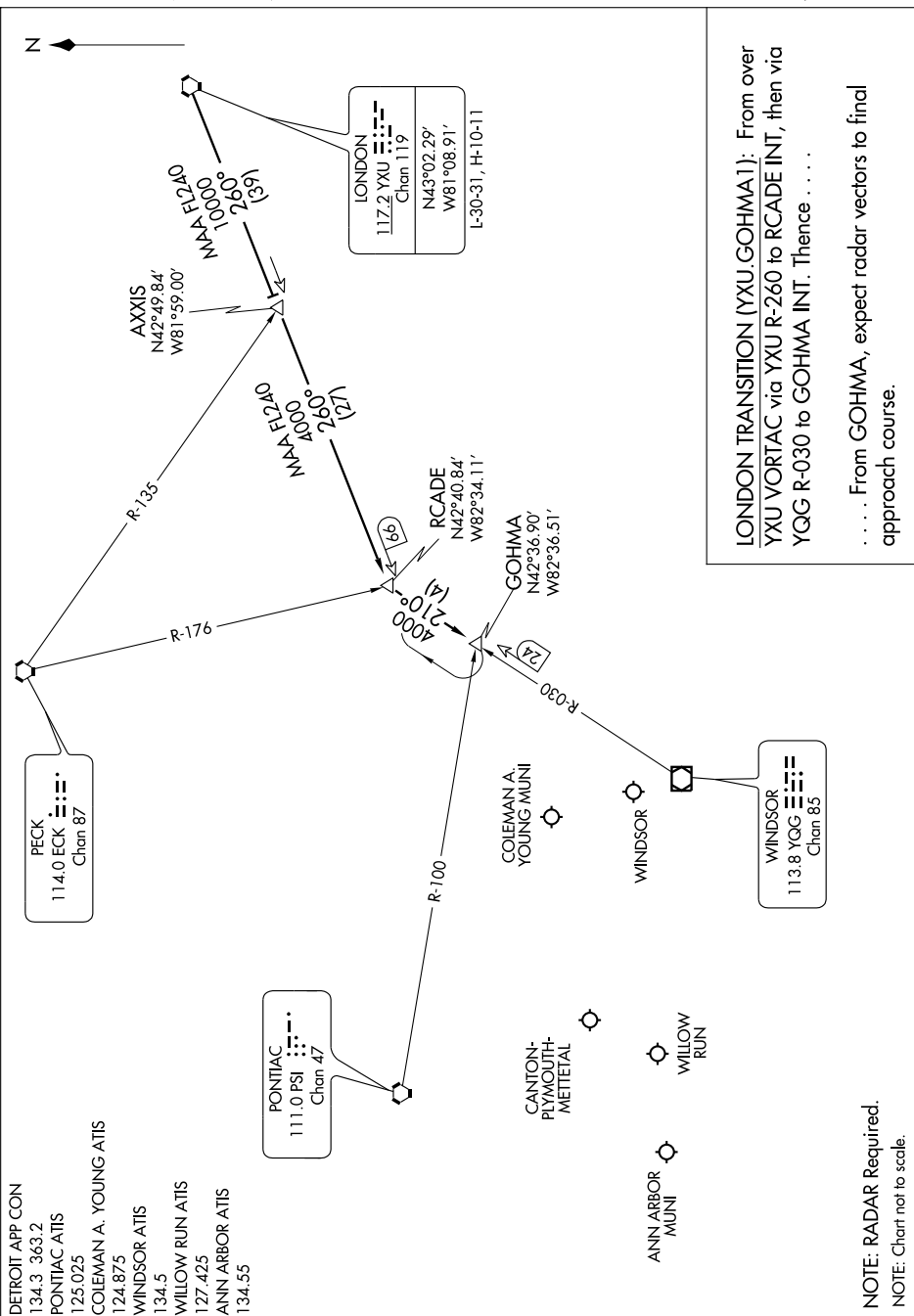
WILLOW RUN TOWER
125.275 256.9

GND CON
121.75



DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



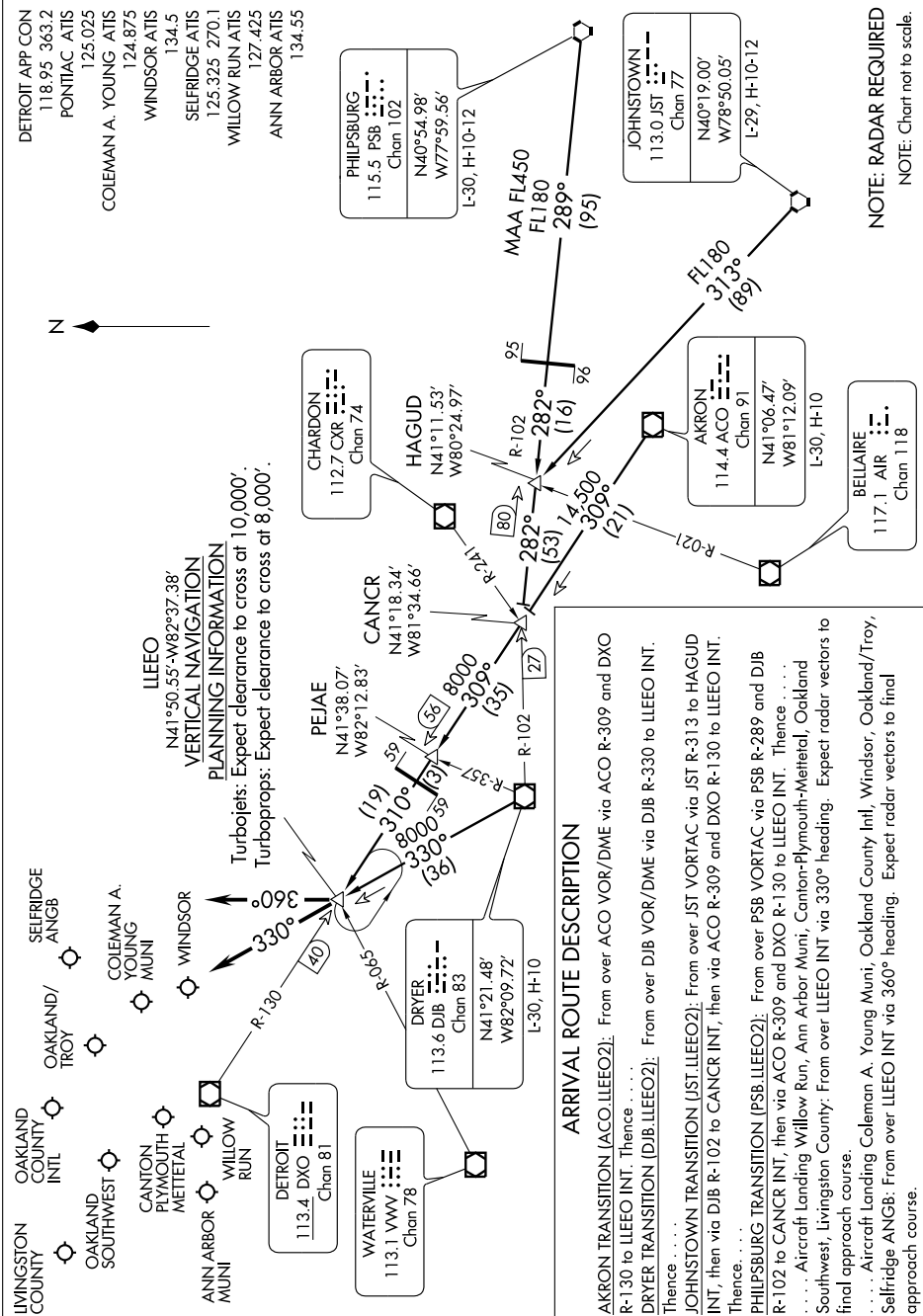
EC-1. 26 AUG 2010 to 23 SEP 2010

NOTE: RADAR Required.
NOTE: Chart not to scale.

GOHMA ONE ARRIVAL
(GOHMA.GOHMA1) 09351

DETROIT, MICHIGAN

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

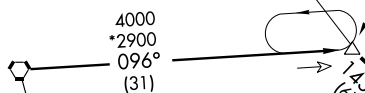
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFIDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDY

PARKY

N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT

113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFIDGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTETALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

(SPRTN.SPRTN3) 10210

DETROIT, MICHIGAN

DETROIT/GROSSE ILE

GROSSE ILE MUNI (ONZ) 2 S UTC-5(-4DT) N42°05.94' W83°09.69'

591 B S4 FUEL 100LL JET A TPA-1591(1000) NOTAM FILE ONZ

RWY 04-22: H4846X100 (CONC) S-66, D-83, 2D-105 MIRL 0.3% up NE

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Rgt tfc.

RWY 22: REIL. PAPI (P4L)—GA 3.0° TCH 38'. Thld dsplcd 428'. Trees.

RWY 17-35: H4425X75 (CONC) S-40, D-55, 2D-90 MIRL

RWY 17: PAPI(P4L)—GA 3.0° TCH 26'. Thld dsplcd 675'. Trees.

RWY 35: PAPI(P4L)—GA 3.0° TCH 20'. Brush. Rgt tfc.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z†, Sat-Sat 1300-2200Z†. Birds and deer on and invof arpt. Arpt CLOSED to air carrier ops with more than 30 passenger seats except PPR, call arpt manager 734-675-0155. Rwy 04 PAPI OTS indef. Rwy 04 REIL OTS indef. MIRL Rwy 04-22 and 17-35 preset low ints dusk-0400Z†; to increase ints and ACTIVATE after 0400Z†—CTAF. ACTIVATE REIL Rwy 04 and PAPI Rwy 17 and Rwy 35 and Rwy 22 and Rwy 04—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.675 (734) 692-9686**COMMUNICATIONS:** CTAF/UNICOM 123.0

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

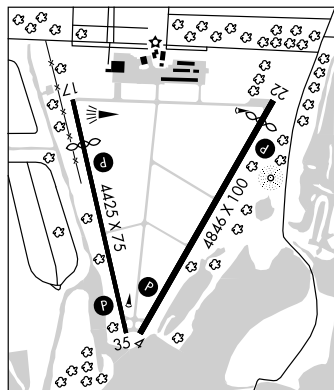
Ⓡ DETROIT APP/DEP CON 134.3 GCO 121.725 (DETROIT CLNC and LANSING FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 080° 13.6 NM to fld. 629/3W.

HIWAS.

NDB (MHW) 419 RYS N42°06.07' W83°09.18' at fld. NOTAM FILE ONZ.



DEXTER

CACKLEBERRY (2E8) 5 NW UTC-5(-4DT) N42°25.50' W83°52.16'

890 NOTAM FILE LAN

RWY 06-24: 2113X100 (TURF)

RWY 06: Thld dsplcd 315'. Trees.

RWY 24: Thld dsplcd 300'. Tree.

AIRPORT REMARKS: Attended irregularly. Snow removal limited, check rwy condition prior to use winter months. Rwy 06-24 marked with cones; dsplcd thlds marked with two cones each side. Rwy 06-24 NSTD LIRL due to color and configuration; not for public use.

COMMUNICATIONS: CTAF 122.9

DOUBLE JJ RESORT RANCH (See ROTHBURY)

DOWAGIAC MUNI (C91) 1 NW UTC-5(-4DT) N41°59.58' W86°07.70'

747 B FUEL 100LL TPA-1548(800) NOTAM FILE LAN

RWY 09-27: H4700X100 (ASPH) S-30, D-60 MIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 35'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees. Rgt tfc.

RWY 04-22: 2176X100 (TURF)

RWY 04: Trees. RWY 22: Thld dsplcd 388'. Tree. Rgt tfc.

AIRPORT REMARKS: Attended 1300Z†-dusk. Self svc fuel avbl 24 hrs. Numerous ultralights and acft with no radio on and invof arpt. Deer on and invof arpt. Model radio ctl acft opr E side of Rwy 04-22. ACTIVATE MIRL Rwy 09-27; VASI Rwy 09 and PAPI Rwy 27; and REIL Rwy 09 and 27-122.8. Rwy 04-22 and dspl thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

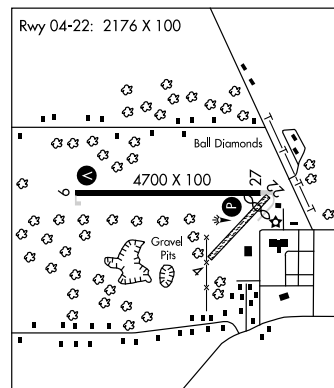
KEELER RCO 122.1R116.6T (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc Ⓡ CHICAGO CENTER APP/DEP CON 127.55

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66'

W86°07.36' 182° 9.1 NM to fld. 795/OOE.



CHICAGO

L-281

IAP



NOTE: DME Required.
NOTE: Chart not to scale.

DETROIT, MICHIGAN

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, OMI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

NDB RWY 4

DETROIT / GROSSE ILE MUNI (ONZ)

NDB RYS 419	APP CRS 044°	Rwy Idg 4846 TDZE 590 Apt Elev 591
-----------------------	------------------------	---

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 40 feet. Increase AHLES fix minimums Circling Cat A, C, and D visibilities ¼ mile.

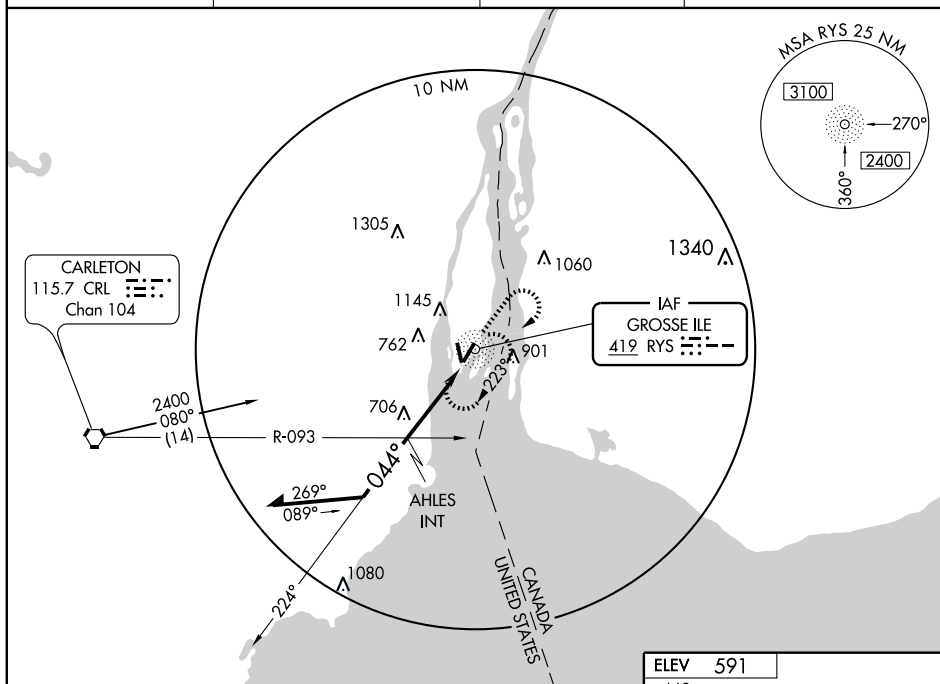
MISSED APPROACH: Climb to 1900 then climbing right turn to 2400 direct RYS NDB and hold.

AWOS-3
119.675

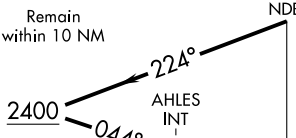
DETROIT APP CON
134.3 363.2

GCO
121.725

UNICOM
123.0 (CTAF)



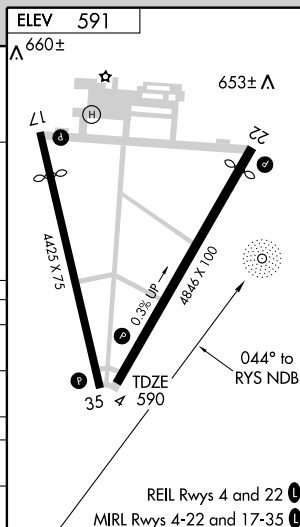
Remain within 10 NM



* 1540 when using Detroit Metropolitan Wayne County altimeter setting.

* 1500

CATEGORY	A	B	C	D
S-4	1500-1¼	910 (1000-1¼)	1500 - 2¾ 910 (1000-2¾)	1500 - 3 910 (1000-3)
CIRCLING	1500-1¼	909 (1000-1¼)	1500 - 2¾ 909 (1000-2¾)	1500 - 3 909 (1000-3)
AHLES FIX MINIMUMS				
S-4	1140 - 1	550 (600-1)	1140 - 1½ 550 (600-1½)	1140 - 1¾ 550 (600-1¾)
CIRCLING	1460 - 1 869 (900-1)	1460 - 1¼ 869 (900-1¼)	1460 - 2½ 869 (900-2½)	1460 - 2¾ 869 (900-2¾)



DETROIT/GROSSE ILE, MICHIGAN

Amdt 2 09127

DETROIT / GROSSE ILE MUNI (ONZ)

42°06'N - 83°10'W

NDB RWY 4

APP CRS	Rwy Idg	4846
037°	TDZE	590
	Apf Elev	591

RNAV (GPS) RWY 4

DETROIT / GROSSE ILE MUNI (ONZ)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 40 feet and Circling visibilities Cat A, C, and D $\frac{1}{4}$ mile.

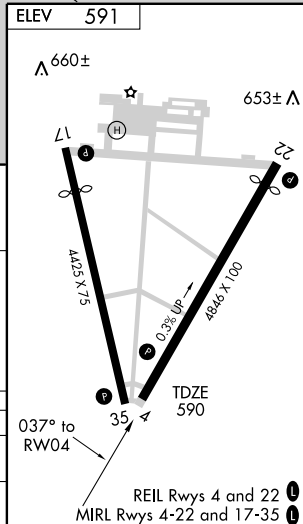
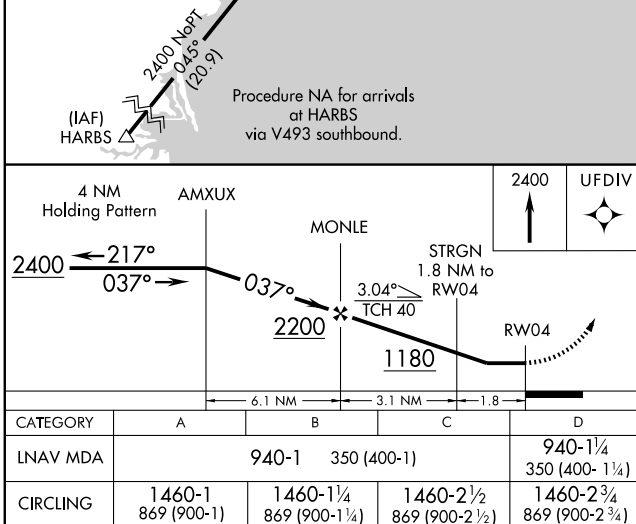
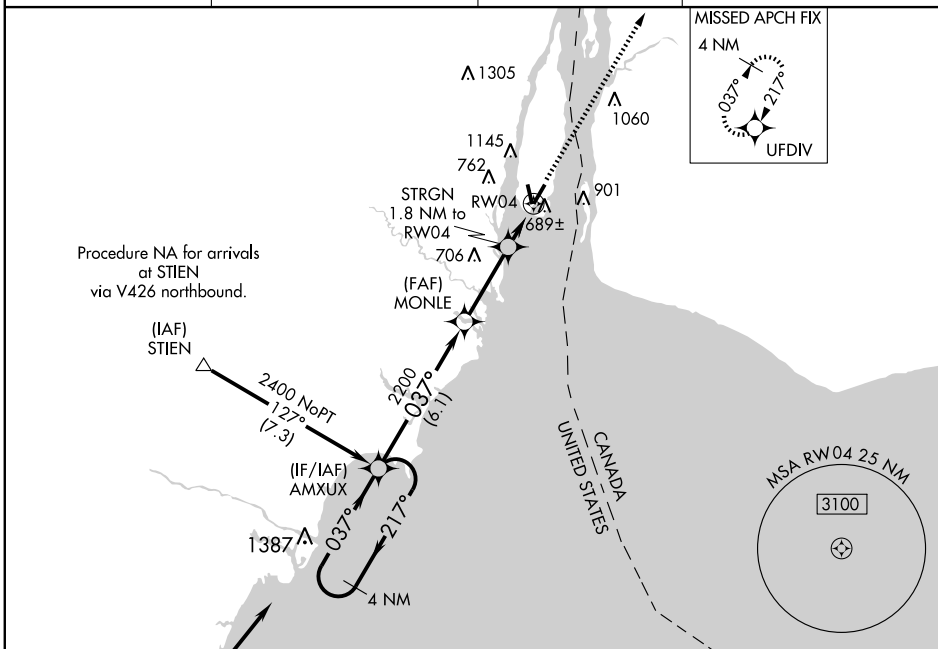
MISSED APPROACH:
Climb to 2400 direct UFDIV and hold.

AWOS-3
119.675

DETROIT APP CON
134.3 363.2

GCO
121.725

UNICOM
123.0 (CTAF) **0**



(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

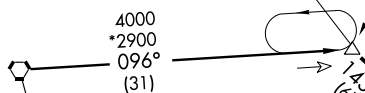
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFIDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT

113.4 DXO

Chan 81

FLINT

116.9 FNT

Chan 116

PONTIAC

111.0 PSI

Chan 47

ROMEO STATE

OAKLAND COUNTY
INTLSELFIDGE
ANG BASEOAKLAND
SOUTHWESTOAKLAND/
TROYCOLEMAN A.
YOUNG MUNICANTON-
PLYMOUTH-
METTETAL

WINDSOR

WILLOW
RUNGROSSE ILE
MUNI

MEYERS-DIVER'S

CUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

VORTAC CRL 115.7 Chan 104	APP CRS 080°	Rwy Idg TDZE Apt Elev N/A N/A 591
---	------------------------	---

VOR-A

DETROIT / GROSSE ILE MUNI (ONZ)

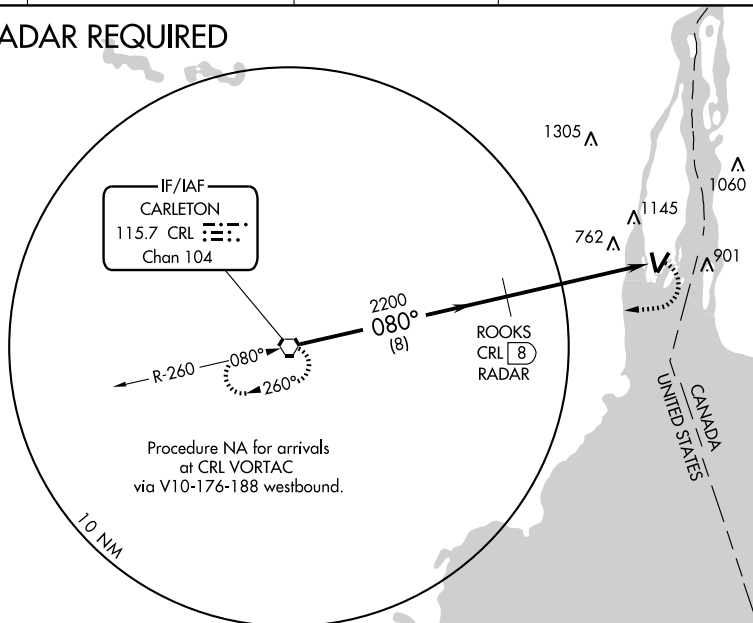
V When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 40 feet and Cat A, C, and D visibilities ¼ mile.

MISSED APPROACH: Climbing right turn to 2400 direct CRL VORTAC and hold.

AWOS-3 119.675	DETROIT APP CON 134.3 363.2	GCO 121.725	UNICOM 123.0 (CTAF)
--------------------------	---------------------------------------	-----------------------	-------------------------------

1391

RADAR REQUIRED



Procedure NA for arrivals
at CRL VORTAC
via V10-176-188 westbound.

MSA CRL 25 NM

3100

VORTAC

ROOKS
CRL 8
RADAR

2400

CRL

115.7

2200

080°

2200

080°

CRL

13.4

8 NM

5.4 NM

REIL Rwy 4 and 22
MIRL Rwy 4-22 and 17-35

CATEGORY	A	B	C	D	FAF to MAP 5.4 NM					
CIRCLING	1460 - 1 869 (900-1)	1460 - 1¼ 869 (900-1¼)	1460 - 2½ 869 (900-2½)	1460 - 2¾ 869 (900-2¾)	Knots	60	90	120	150	180
					Min:Sec	5:24	3:36	2:42	2:10	1:48

DETROIT/GROSSE ILE, MICHIGAN

Amdt 7 09127

DETROIT / GROSSE ILE MUNI (ONZ)

42°06'N - 83°10'W

VOR-A

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT/GROSSE ILE**GROSSE ILE MUNI** (ONZ) 2 S UTC-5(-4DT) N42°05.94' W83°09.69'

591 B S4 FUEL 100LL JET A TPA-1591(1000) NOTAM FILE ONZ

RWY 04-22: H4846X100 (CONC) S-66, D-83, 2D-105 MIRL 0.3% up NE

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Rgt tfc.

RWY 22: REIL. PAPI (P4L)—GA 3.0° TCH 38'. Thld dsplcd 428'. Trees.

RWY 17-35: H4425X75 (CONC) S-40, D-55, 2D-90 MIRL

RWY 17: PAPI(P4L)—GA 3.0° TCH 26'. Thld dsplcd 675'. Trees.

RWY 35: PAPI(P4L)—GA 3.0° TCH 20'. Brush. Rgt tfc.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z†, Sat-Sat 1300-2200Z†. Birds and deer on and invof arpt. Arpt CLOSED to air carrier ops with more than 30 passenger seats except PPR, call arpt manager 734-675-0155. Rwy 04 PAPI OTS indef. Rwy 04 REIL OTS indef. MIRL Rwy 04-22 and 17-35 preset low ints dusk-0400Z†; to increase ints and ACTIVATE after 0400Z†—CTAF. ACTIVATE REIL Rwy 04 and PAPI Rwy 17 and Rwy 35 and Rwy 22 and Rwy 04—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.675 (734) 692-9686**COMMUNICATIONS:** CTAF/UNICOM 123.0

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

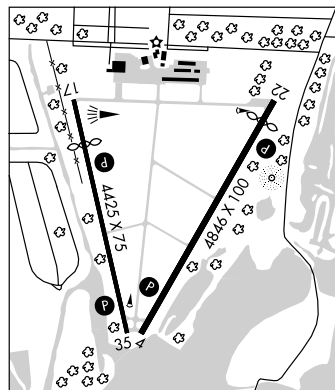
Ⓡ DETROIT APP/DEP CON 134.3 GCO 121.725 (DETROIT CLNC and LANSING FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 080° 13.6 NM to fld. 629/3W.

HIWAS.

NDB (MHW) 419 RYS N42°06.07' W83°09.18' at fld. NOTAM FILE ONZ.

**DEXTER****ACKLEBERRY** (2E8) 5 NW UTC-5(-4DT) N42°25.50' W83°52.16'

890 NOTAM FILE LAN

RWY 06-24: 2113X100 (TURF)

RWY 06: Thld dsplcd 315'. Trees.

RWY 24: Thld dsplcd 300'. Tree.

AIRPORT REMARKS: Attended irregularly. Snow removal limited, check rwy condition prior to use winter months. Rwy 06-24 marked with cones; dsplcd thlds marked with two cones each side. Rwy 06-24 NSTD LIRL due to color and configuration; not for public use.

COMMUNICATIONS: CTAF 122.9**DOUBLE JJ RESORT RANCH** (See ROTHBURY)**DOWAGIAC MUNI** (C91) 1 NW UTC-5(-4DT) N41°59.58' W86°07.70'

747 B FUEL 100LL TPA-1548(800) NOTAM FILE LAN

RWY 09-27: H4700X100 (ASPH) S-30, D-60 MIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 35'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees. Rgt tfc.

RWY 04-22: 2176X100 (TURF)

RWY 04: Trees. RWY 22: Thld dsplcd 388'. Tree. Rgt tfc.

AIRPORT REMARKS: Attended 1300Z†-dusk. Self svc fuel avbl 24 hrs. Numerous ultralights and acft with no radio on and invof arpt. Deer on and invof arpt. Model radio ctl acft opr E side of Rwy 04-22. ACTIVATE MIRL Rwy 09-27; VASI Rwy 09 and PAPI Rwy 27; and REIL Rwy 09 and 27-122.8. Rwy 04-22 and dspl thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

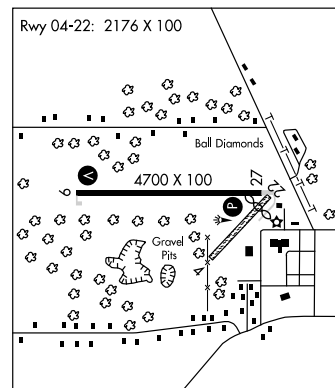
KEELER RCO 122.1R116.6T (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc Ⓡ CHICAGO CENTER APP/DEP CON 127.55

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66'

W86°07.36' 182° 9.1 NM to fld. 795/OOE.

**CHICAGO**

L-281

IAP

APP CRS **095°**
 Rwy ldg **4700**
 TDZE **740**
 Apt Elev **747**

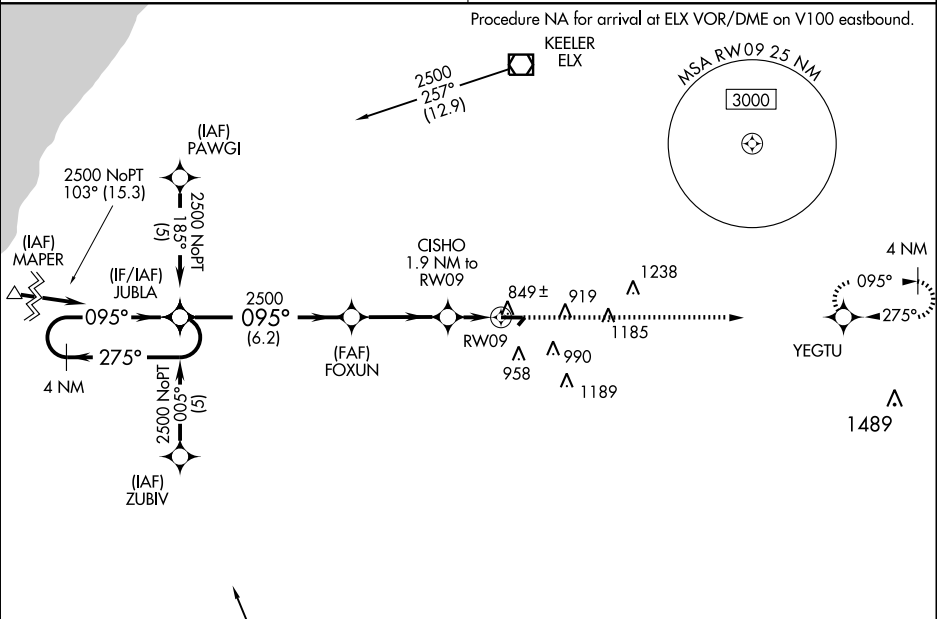
RNAV (GPS) RWY 9
 DOWAGIAC MUNI (C91)

NA DME/DME RNP-0.3 NA. Procedure NA at night.
 Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF, when not received, use Elkhart altimeter setting and increase all MDA 60 feet; increase LNAV and circling Cat C visibility ¼ mile.

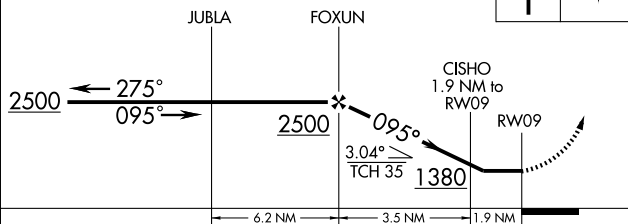
MISSED APPROACH: Climb to 2700 direct YEGTU and hold.

SOUTH BEND APP CON ★
118.55 257.8

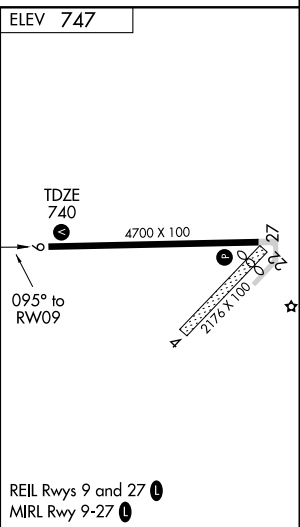
UNICOM
122.8 (CTAF) 0



4 NM
 Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1100-1	360 (400-1)	1100-1¼	360 (400-1¼)
CIRCLING	1320-1	573 (600-1)	1340-1½	593 (600-2)



APP CRS **275°**
 Rwy ldg **4700**
 TDZE **747**
 Apt Elev **747**

RNAV (GPS) RWY 27

DOWAGIAC MUNI (C91)

NA DME/DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF, when not received, use Elkhart altimeter setting and increase all MDA 60 feet; increase circling Cat C visibility ¼ mile.

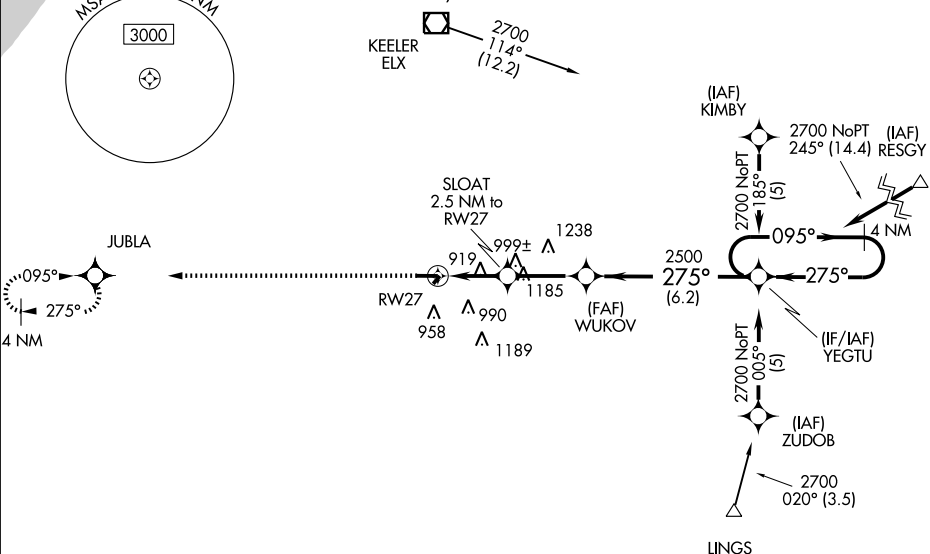
MISSED APPROACH: Climb to 2500 direct JUBLA and hold.

SOUTH BEND APP CON ★
118.55 257.8

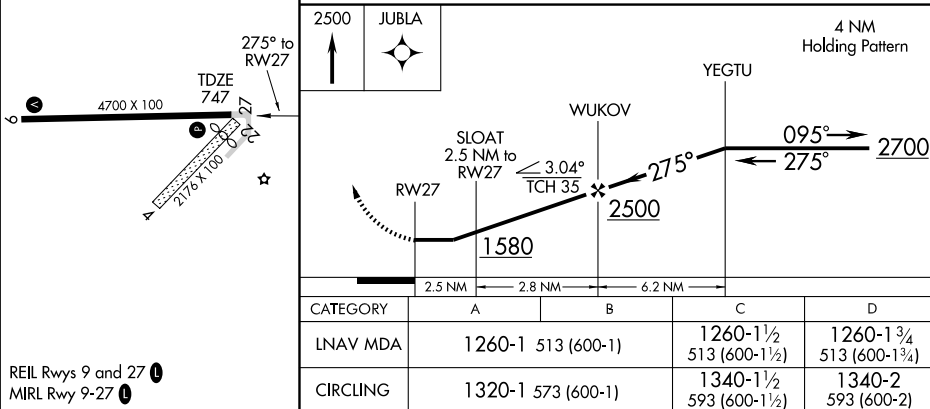
UNICOM
122.8 (CTAF) 0

Procedure NA for arrival on ELX
 VOR/DME airway radials 061 CW 077.

Procedure NA for arrivals at
 RESGY on V285 northbound.



ELEV **747**



REIL Rwy 9 and 27 0
 MRL Rwy 9-27 0

VOR/DME ELX 116.6 Chan 113	APP CRS 181°	Rwy Idg TDZE Apt Elev N/A N/A 747
--	------------------------	---

VOR-A

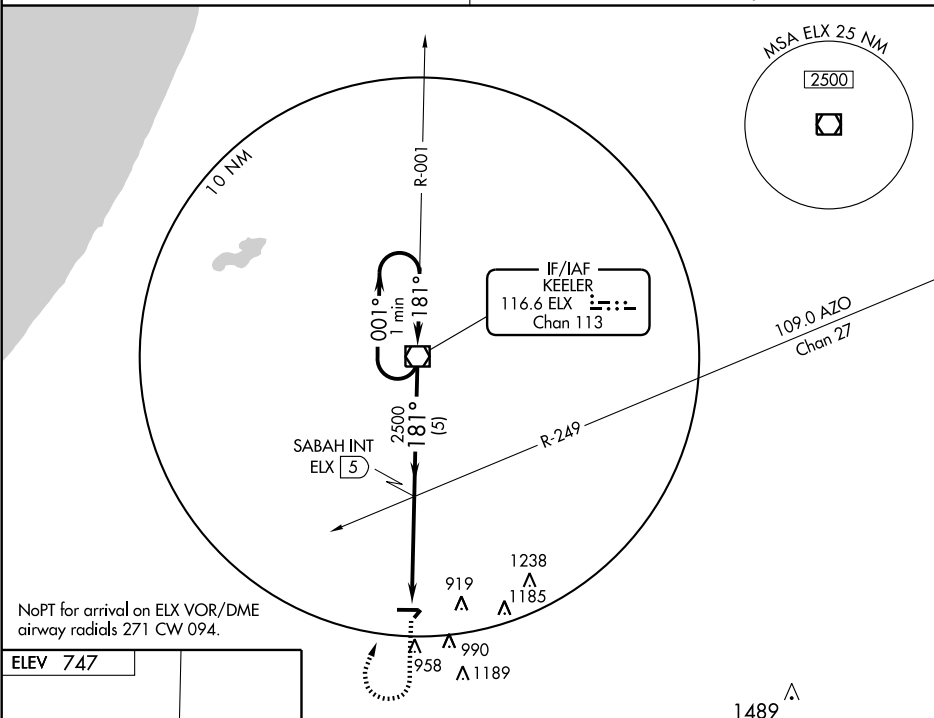
DOWAGIAC MUNI (C91)

▼ Circling to Rwy 9 NA at night. Visibility reduction by helicopters NA.
 ▲ NA Obtain local altimeter setting on CTAF; when not received, use Elkhart
 altimeter setting and increase all MDA 60 feet; increase circling Cat C
 visibility ¼ mile.

MISSED APPROACH: Climb to 2500
 then right turn direct ELX VOR/DME
 and hold.

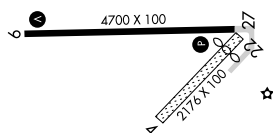
SOUTH BEND APP CON *
118.55 257.8

UNICOM
122.8 (CTAF) 0



ELEV 747

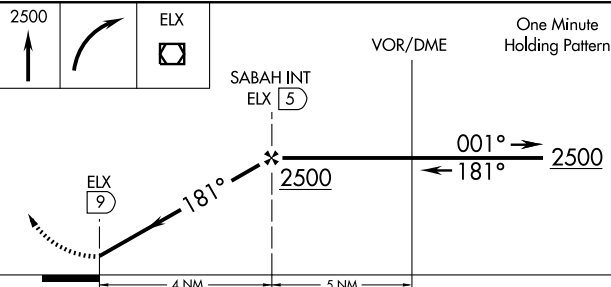
181° 4 NM
 from FAF



REIL Rwy 9 and 27
 MRL Rwy 9-27

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
CIRCLING	1320-1 573 (600-1)		1340-1½ 593 (600-1½)	1340-2 593 (600-2)

DRUMMOND ISLAND (DRM) 1 SW UTC-5(-4DT) N46°00.56' W83°44.64'

LAKE HURON

668 B S4 FUEL 100LL, JET A, MOGAS OX 1, 3 LRA NOTAM FILE DRM

L-31C

RWY 08-26: H4000X75 (ASPH) MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 35'. Thld dsplcd 650'. Trees.

RWY 26: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 170'. Road.

RWY 18-36: 2500X150 (TURF)

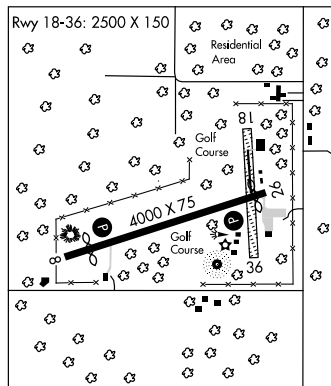
RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z±. Birds and deer invof arpt. Occasional golf carts and pedestrians crossing Rwy 08-26 due to golf course on both sides. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 center 20' portion of rwy from intersection Rwy 18-36 N to the hangar line is asph; remainder of rwy turf. ACTIVATE MIRL Rwy 08-26 and PAPI Rwy 08 and 26—CTAF. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 118.325 (906) 493-6410.**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **TORONTO CENTER APP/DEP CON** 132.65**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 139° 33.9 NM to fld. 687/4W.

NDB (MHW) 218 DRM N46°00.44' W83°44.53' at fld. NOTAM FILE DRM. Unmonitored.

**DUFORD FLD** (See GENESSEE)**DUPONT-LAPEER** (See LAPEER)**EAST JORDAN CITY** (Y94) 2 SE UTC-5(-4DT) N45°07.81' W85°06.40'

GREEN BAY

642 NOTAM FILE LAN

L-31B

RWY 09-27: H3250X50 (ASPH) MIRL

RWY 09: Road. RWY 27: VASI(V2L)—GA 4.0° TCH 32'. Thld dsplcd 125'. Road.

RWY 18-36: 1800X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Unattended. Birds and deer on and invof arpt. Rwy 18-36 CLOSED indef. 1670' MSL tower 3 NM NE. ACTIVATE MIRL Rwy 9-27 and VASI Rwy 27—122.8. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 surface rough with bare spots.

COMMUNICATIONS: CTAF 122.9**GAYLORD RCO** 122.55 (LANSING RADIO)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 299° 18.5 NM to fld. 1318/4W.

EAST TAWAS**IOSCO CO** (6D9) 3 NE UTC-5(-4DT) N44°18.77' W83°25.34'

LAKE HURON

606 B S4 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 08-26: H4802X75 (ASPH) S-12 MIRL

IAP

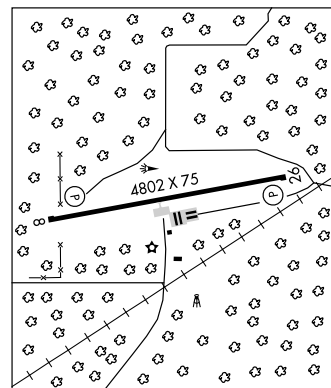
RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

RWY 26: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z±, Sundays on call 989-362-4515. For airframe repairs call 989-362-4515. Parachute Jumping. Numerous deer on and invof arpt. ACTIVATE MIRL Rwy 08-26—122.85.

COMMUNICATIONS: CTAF/UNICOM 122.8Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.475**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.

AU SABLE (H) VORW/DME 116.1 ASP Chan 108 N44°26.95' W83°23.66' 195° 8.3 NM to fld. 625/7W.



NDB DRM 218	APP CRS 250°	Rwy Idg TDZE Apt Elev	3830 661 668
-----------------------	------------------------	-----------------------------	---

NDB RWY 26

DRUMMOND ISLAND (DRM)

▼ Obtain local altimeter setting on CTAF; when not received, use Sault Ste Marie Chippewa County Intl altimeter setting.

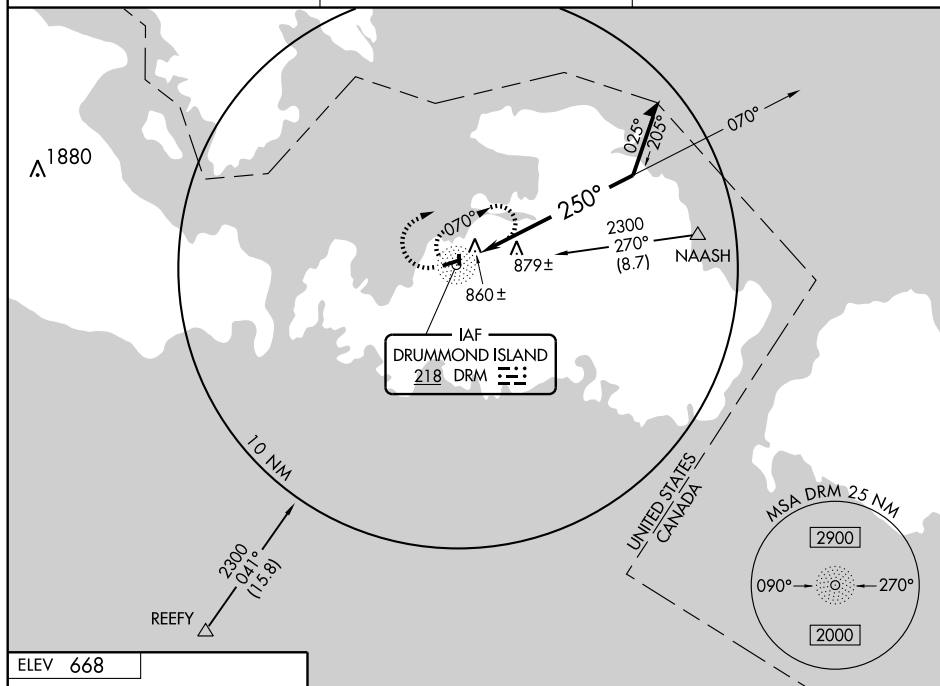
▲ NA

MISSED APPROACH: Climbing right turn to 2300 in DRM NDB holding pattern.

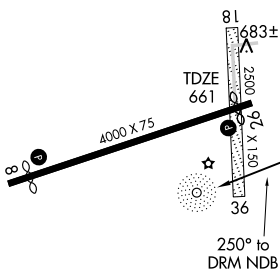
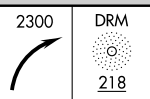
AWOS-3
118.325

TORONTO CENTER
132.65 344.5

UNICOM
122.8 (CTAF) 0



ELEV 668



CATEGORY	A	B	C	D
S-26	1220-1	559 (600-1)	1220-1½ 559 (600-1½)	NA
CIRCLING	1220-1	552 (600-1)	1220-1½ 552 (600-1½)	NA
SAULT STE MARIE CHIPPEWA CO INTL ALTIMETER MINIMA				
S-26	1320-1	659 (700-1)	1320-1¾ 659 (700-1¾)	NA
CIRCLING	1320-1	652 (700-1)	1320-1¾ 652 (700-1¾)	NA

MIRL Rwy 8-26 0

DRUMMOND ISLAND, MICHIGAN
Amdt 1 10042

46°01'N - 83°45'W

DRUMMOND ISLAND (DRM)
NDB RWY 26

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

APP CRS 079°	Rwy Idg TDZE Apt Elev	3350 661 668
------------------------	-----------------------------	---

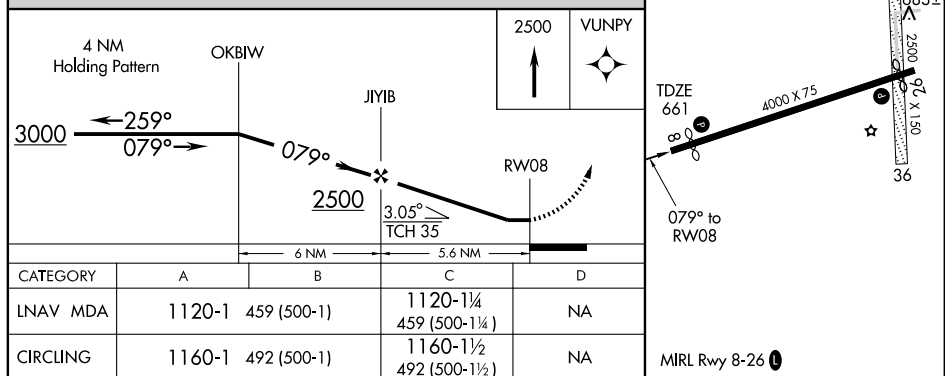
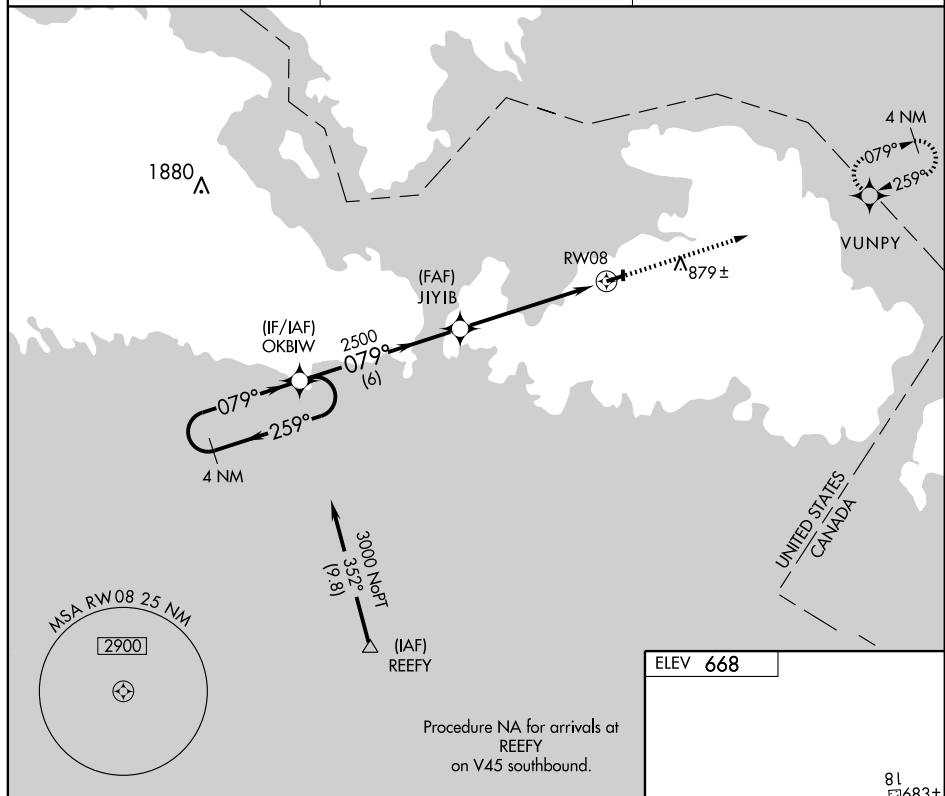
RNAV (GPS) RWY 8

DRUMMOND ISLAND (DRM)

- DME/DME RNP-0.3 NA.** Visibility reduction by helicopters NA. Circling to Rwy 18-36 NA. When local altimeter setting not received, use Sauli Ste Marie altimeter setting and increase all MDA 100 feet, increase LNAV Cat C visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 2500
direct VUNPY and hold.

AWOS-3 118.325	TORONTO CENTER 132.65 344.5	UNICOM 122.8 (CTAF) ①
--------------------------	---------------------------------------	---------------------------------



RNAV (GPS) RWY 26

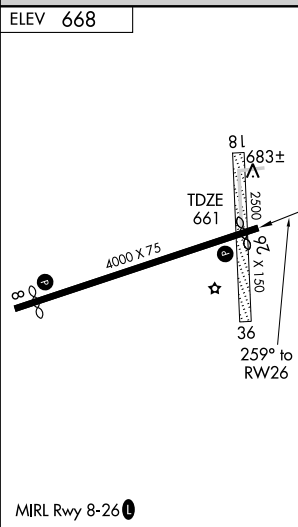
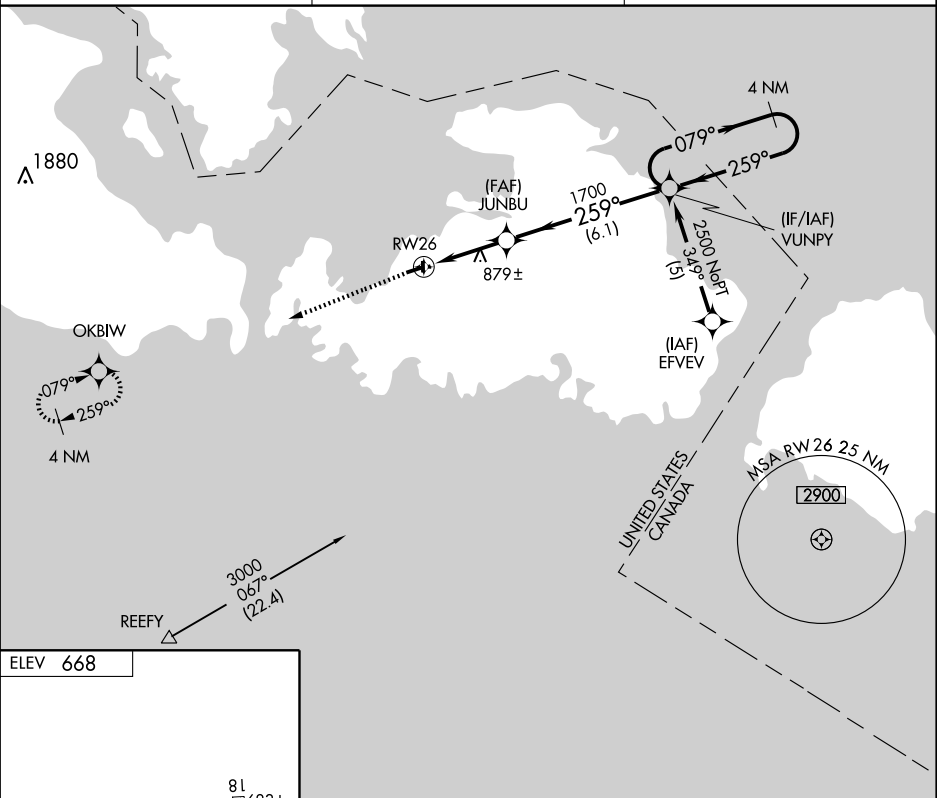
DRUMMOND ISLAND (DRM)

APP CRS 259°	Rwy Idg TDZE Apt Elev	3830 661 668
------------------------	-----------------------------	---

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 18-36 NA.
▲ When local altimeter setting not received, use Sault Ste Marie altimeter setting and increase all MDA 100 feet and increase LNAV Cat C and Circling Cat C visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 3000 direct OKBIW and hold.

AWOS-3 118.325	TORONTO CENTER 132.65 344.5	UNICOM 122.8 (CTAF) 0
--------------------------	---------------------------------------	---------------------------------



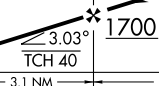



MIRL Rwy 8-26 0

DRUMMOND ISLAND, MICHIGAN
 Orig 29JUL10

46°01'N - 83°45'W

DRUMMOND ISLAND (DRM)
RNAV (GPS) RWY 26

<div>3000</div> <div>OKBIW</div> <div><div>↑</div><div></div></div>		<div>4 NM</div> <div>Holding Pattern</div>		
<div><div>RW26</div><div></div></div>		<div>JUNBU</div> <div></div> <div>1700</div>	<div>VUNPY</div> <div></div> <div>079° →</div> <div>← 259°</div> <div>2500</div> <div>VGSI and descent angles not coincident.</div>	
3.1 NM		6.1 NM		
CATEGORY	A	B	C	D
LNAV MDA	1180-1	519 (600-1)	1180-1½ 519 (600-1½)	NA
CIRCLING	1180-1	512 (600-1)	1180-1½ 512 (600-1½)	NA

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DRUMMOND ISLAND (DRM) 1 SW UTC-5(-4DT) N46°00.56' W83°44.64'

LAKE HURON

668 B S4 FUEL 100LL, JET A, MOGAS OX 1, 3 LRA NOTAM FILE DRM

L-31C

RWY 08-26: H4000X75 (ASPH) MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 35'. Thld dsplcd 650'. Trees.

RWY 26: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 170'. Road.

RWY 18-36: 2500X150 (TURF)

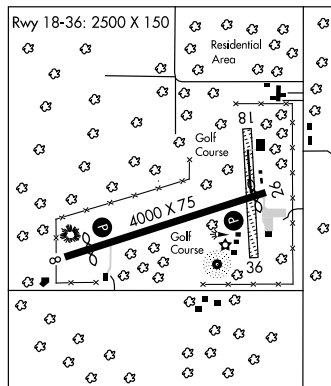
RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z±. Birds and deer invof arpt. Occasional golf carts and pedestrians crossing Rwy 08-26 due to golf course on both sides. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 center 20' portion of rwy from intersection Rwy 18-36 N to the hangar line is asph; remainder of rwy turf. ACTIVATE MIRL Rwy 08-26 and PAPI Rwy 08 and 26—CTAF. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 118.325 (906) 493-6410.**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **TORONTO CENTER APP/DEP CON** 132.65**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 139° 33.9 NM to fld. 687/4W.

NDB (MHW) 218 DRM N46°00.44' W83°44.53' at fld. NOTAM FILE DRM. Unmonitored.

**DUFORD FLD** (See GENESSEE)**DUPONT-LAPEER** (See LAPEER)**EAST JORDAN CITY** (Y94) 2 SE UTC-5(-4DT) N45°07.81' W85°06.40'

GREEN BAY

642 NOTAM FILE LAN

L-31B

RWY 09-27: H3250X50 (ASPH) MIRL

RWY 09: Road. RWY 27: VASI(V2L)—GA 4.0° TCH 32'. Thld dsplcd 125'. Road.

RWY 18-36: 1800X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Unattended. Birds and deer on and invof arpt. Rwy 18-36 CLOSED indef. 1670' MSL tower 3 NM NE. ACTIVATE MIRL Rwy 9-27 and VASI Rwy 27—122.8. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 surface rough with bare spots.

COMMUNICATIONS: CTAF 122.9

GAYLORD RCO 122.55 (LANSING RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VORV/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 299° 18.5 NM to fld. 1318/4W.

EAST TAWAS**IOSCO CO** (6D9) 3 NE UTC-5(-4DT) N44°18.77' W83°25.34'

LAKE HURON

606 B S4 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 08-26: H4802X75 (ASPH) S-12 MIRL

IAP

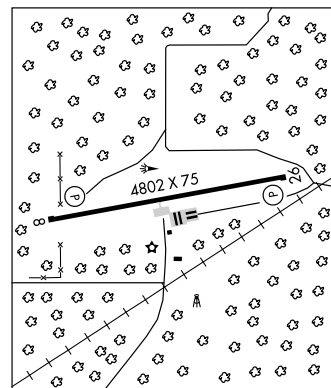
RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

RWY 26: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z±, Sundays on call 989-362-4515. For airframe repairs call 989-362-4515. Parachute Jumping. Numerous deer on and invof arpt. ACTIVATE MIRL Rwy 08-26—122.85.

COMMUNICATIONS: CTAF/UNICOM 122.8Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.475**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.

AU SABLE (H) VORV/DME 116.1 ASP Chan 108 N44°26.95' W83°23.66' 195° 8.3 NM to fld. 625/7W.



VOR/DME ASP 116.1 Chan 108	APP CRS 194°	Rwy Idg TDZE Apt Elev 606	N/A N/A 606
--	------------------------	--	--------------------------

VOR or GPS-A

EAST TAWAS/ IOSCO COUNTY (6D9)

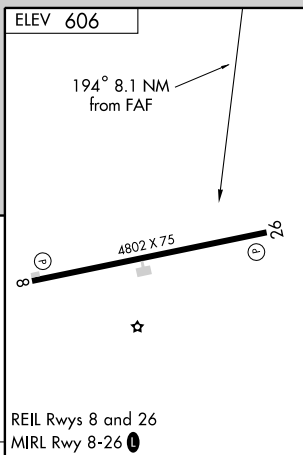
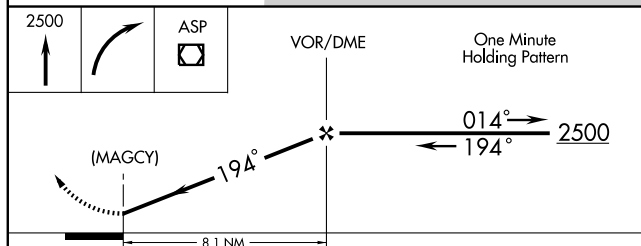
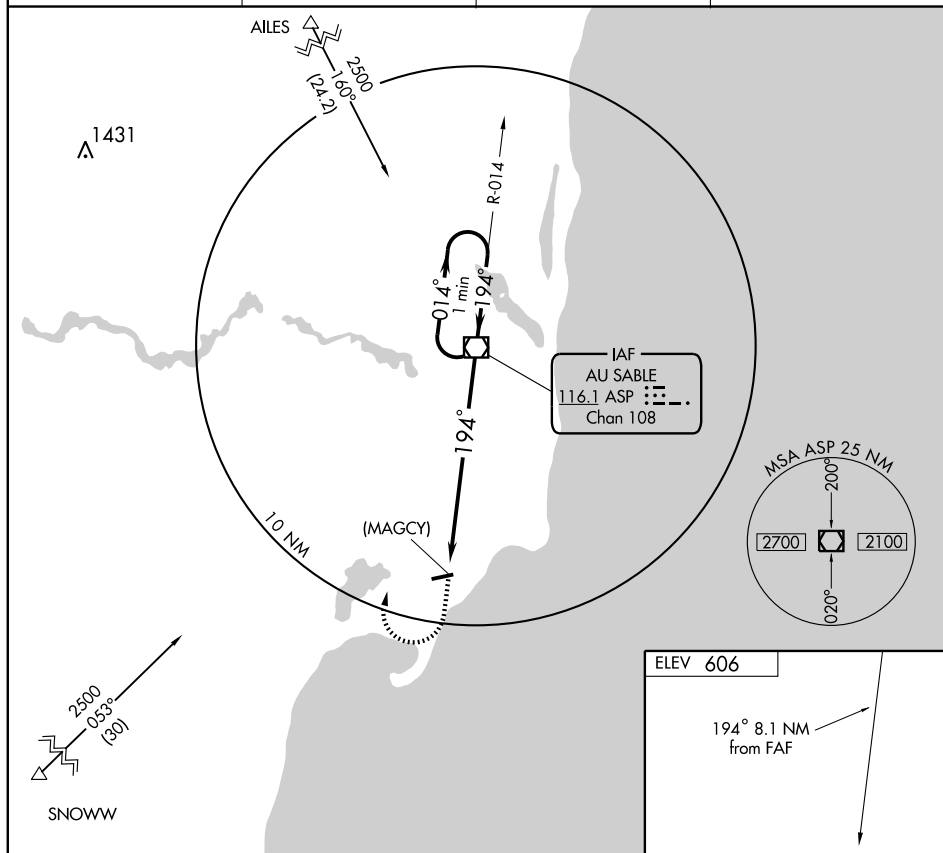
V **NA** Use Oscoda-Wurtsmith altimeter setting.

MISSED APPROACH: Climb to 2500 then right turn direct ASP VOR/DME and hold.

OSCODA-WURTSMITH
AWOS-3
116.1

MINNEAPOLIS CENTER
125.475 269.45

UNICOM
122.8 (CTAF)

122.85 0

CATEGORY	A	B	C	D
CIRCLING	1120 - 1	514 (600-1)	1120 - 1½ 514 (600-1½)	1280 - 2¼ 674 (700-2¼)

FAF to MAP 8.1 NM					
Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42

EASTPORT

TORCHPORT (59M) 3 S UTC-5(-4DT) N45°03.35' W85°21.36'

GREEN BAY

640 NOTAM FILE LAN

RWY 09-27: 3300X100 (TURF)

RWY 09: Trees. RWY 27: Thld dsplcd 1200'. Trees.

RWY 04-22: 2600X100 (TURF)

RWY 04: Tree. RWY 22: Thld dsplcd 600'. Road.

AIRPORT REMARKS: Unattended. No snow removal; 110 V outlets for ski equipped acft. Rwy 09-27 and Rwy 04-22 dsplcd thlds marked with cones. Rwy 09-27 uneven rolling terrain.

COMMUNICATIONS: CTAF: 122.9

EATON RAPIDS

SKYWAY ESTATES (60G) 4 N UTC-5(-4DT) N42°35.02' W84°39.08'

DETROIT

931 B NOTAM FILE LAN

RWY 08-26: 2653X100 (TURF) MIRL

RWY 08: Thld dsplcd 685'. Trees.

RWY 26: Thld dsplcd 200'. Trees.

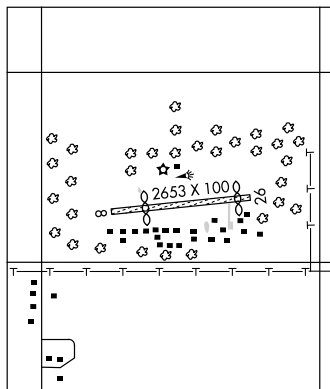
AIRPORT REMARKS: Unattended. Verify arpt condition during winter and spring; call 517-663-2471. Aerobatic box N of Rwy 08-26. Aerobatic practice area in 3 NM radius of arpt during dalgt hrs; 1500' AGL to 6000' MSL. Check with Lansing twr. Rwy 26 also, apch ratio 12:1 over 28' tree, 345' distance, 15' left. ACTIVATE MIRL Rwy 08-26—CTAF. Rwy 08-26 and dsplcd thlds marked with 3' yellow cones. NOTE: See Special Notices—Aerobatic Practice Area.

COMMUNICATIONS: CTAF 122.9

LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 171° 8.3 NM to fld. 887/5W.



EDWARD F JOHNSON (See ISHPERING)

ELK RAPIDS

YUBA (34U) 4 S UTC-5(-4DT) N44°50.33' W85°25.87'

GREEN BAY

645 NOTAM FILE LAN

RWY 18-36: 2975X100 (TURF)

RWY 18: Trees. RWY 36: P-line.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov thru Apr. Orchard/crops both sides of rwy. Rwy slopes down from S to N.

COMMUNICATIONS: CTAF 122.9

ELWELL

HAMP (68R) 3 W UTC-5(-4DT) N43°23.97' W84°48.05'

DETROIT

825 S4 NOTAM FILE LAN

RWY 09-27: 2580X100 (TURF)

RWY 09: Thld dsplcd 1180'. Pole. RWY 27: Trees.

AIRPORT REMARKS: Attended continuously. Rwy 09-27 rolling terrain. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. NSTD rwy lighting, for local use only.

COMMUNICATIONS: CTAF 122.9

EMMETT

SHARPE'S STRIP (2E2) 2 N UTC-5(-4DT) N42°57.10' W82°46.56'

DETROIT

810 NOTAM FILE LAN

RWY 18-36: 2700X90 (TURF)

RWY 18: Thld dsplcd 700'. P-line. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Deer and turkeys invof arpt. Rwy 18 and Rwy 36 and dsplcd thld marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

VORTAC LAN 110.8 Chan 45	APP CRS 171°	Rwy Idg TDZE Apt Elev N/A N/A 931
--	------------------------	---

VOR or GPS-A

EATON RAPIDS / SKYWAY ESTATES (60G)

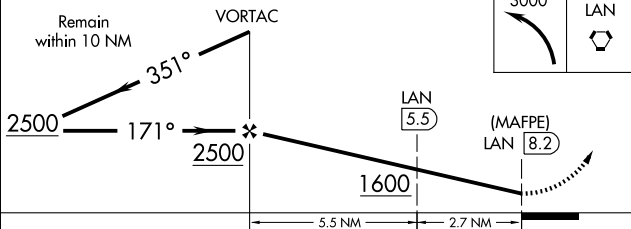
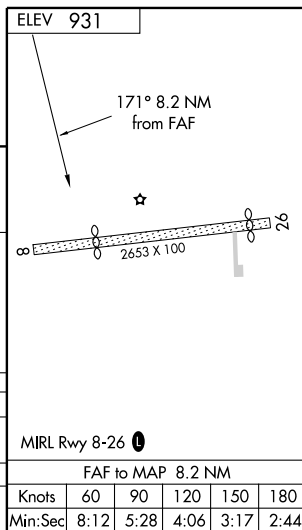
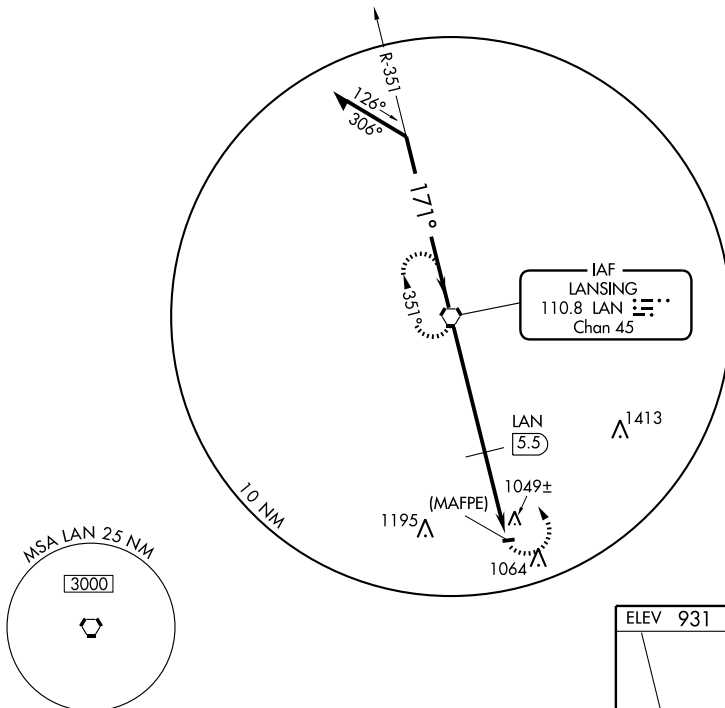


Use Lansing altimeter setting.

MISSED APPROACH: Climbing left turn to 3000 direct LAN VORTAC and hold.

LANSING APP CON
118.65 226.4

CTAF
122.9 0



CATEGORY	A	B	C	D
CIRCLING	1680-1 749 (800-1)	1680-1¼ 749 (800-1¼)	NA	
DME MINIMUMS				
CIRCLING	1480-1	549 (600-1)	NA	

EMPIRE (Y87) 3 SE UTC-5(-4DT) N44°47.25' W86°00.26'

GREEN BAY

944 NOTAM FILE LAN

RWY 17-35: H2600X50 (ASPH) S-12.5 LIRL

RWY 17: Thld dsplcd 718'. Trees.

RWY 35: Thld dsplcd 182'. Trees.

RWY 09-27: 2275X150 (TURF)

RWY 09: Thld dsplcd 200'. Trees.

RWY 27: Thld dsplcd 280'. Road.

AIRPORT REMARKS: Unattended. Rwy 09-27 CLOSED Dec thru Mar and when snow covered, no snow removal.

Ultralight and radio control activity on and invof arpt. Rwy 17-35 loose stones on rwy. Rwy 09-27 uneven rolling terrain. Campground adjacent to arpt; call 231-326-5285. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Rwy 35 windsock 110' E of rwy centerline. LIRL Rwy 17-35 inoperative Nov-May. ACTIVATE LIRL Rwy 17-35 Jun-Oct—CTAF.

COMMUNICATIONS: CTAF 122.9

ERIE AERODROME (M84) 1 SW UTC-5(-4DT) N41°46.96' W83°31.07'

DETROIT

605 **FUEL** MOGAS NOTAM FILE LAN

COPTER

RWY 18-36: 2670X80 (TURF)

RWY 18: Trees. **RWY 36:** Thld dsplcd 760. P-line.

AIRPORT REMARKS: Attended irregularly. -5' ditch N of Rwy 18; 55' left and right of centerline. Rwy 36, +34' power line 50' distance, marked with orange balls. Rwy 18 and Rwy 36 thlds and Rwy 36 dsplcd thld marked with 3' cones.

COMMUNICATIONS: CTAF 122.9

ESCANABA N45°43.36' W87°05.38' NOTAM FILE ESC.

GREEN BAY

(L) **VORW/DME** 110.8 ESC Chan 45 at Delta Co. 594/00E. **HIWAS.**

L-31B

RCO 122.3 (GREEN BAY RADIO)

ESCANABA

DELTA CO (ESC) 2 SW UTC-5(-4DT) N45°43.36' W87°05.62'

GREEN BAY

609 B S2 **FUEL** 100LL, JET A Class I, ARFF Index A NOTAM FILE ESC

H-21, L-31B

RWY 09-27: H6498X150 (ASPH-PFC) S-80, D-120, 2S-152, 2D-210 HIRL

IAP

RWY 09: MALSR. Trees.

RWY 27: REIL. VASI(V4R)—GA 3.0° TCH 53'. Trees.

RWY 18-36: H5015X100 (ASPH-PFC) S-40, D-60 MIRL

0.3% up N

RWY 18: PAPI(P4L)—GA 3.0° TCH 42'. Trees.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 27'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09: TORA-6498 TODA-6498 ASDA-6498 LDA-6498

RWY 18: TORA-5015 TODA-5015 ASDA-5015 LDA-5015

RWY 27: TORA-6498 TODA-6498 ASDA-6498 LDA-6498

RWY 36: TORA-5015 TODA-5015 ASDA-5015 LDA-5015

AIRPORT REMARKS: Attended 1100-0400Z. PPR other times call 906-420-1591. Waterfowl and birds on and invof arpt. Deer on and invof arpt. ACTIVATE HIRL Rwy 09-27; MIRL Rwy 18-36; PAPI Rws 18 and 36; REIL Rwy 36 and MALSR Rwy 09—CTAF. Fee for multi engine acft.

WEATHER DATA SOURCES: AWOS-3 121.425 (906) 786-9001.

HIWAS 110.8 ESC.

COMMUNICATIONS: CTAF/UNICOM 122.8

ESCANABA RCO 122.3 (GREEN BAY RADIO)

® **MINNEAPOLIS CENTER APP/DEP CON** 127.65

RADIO AIDS TO NAVIGATION: NOTAM FILE ESC.

ESCANABA (L) VORW/DME 110.8 ESC Chan 45 N45°43.36' W87°05.38' at fld. 594/00E. **HIWAS.**

PIKLE NDB (LOM) 344 ES N45°43.36' W87°13.49' 087° 5.5 NM to fld.

ILS 109.3 I-ESC Rwy 09. Class IE. LOM PIKLE NDB.



LOC I-ESC	APP CRS	Rwy Idg	6498
<u>109.3</u>	094°	TDZE	609
		Apt Elev	609

ILS or LOC RWY 9
ESCANABA / DELTA COUNTY (ESC)



MISSED APPROACH: Climb to 2100 then climbing right turn to 2500 direct ESC VOR/DME and hold, continue climb-in-hold to 2500.

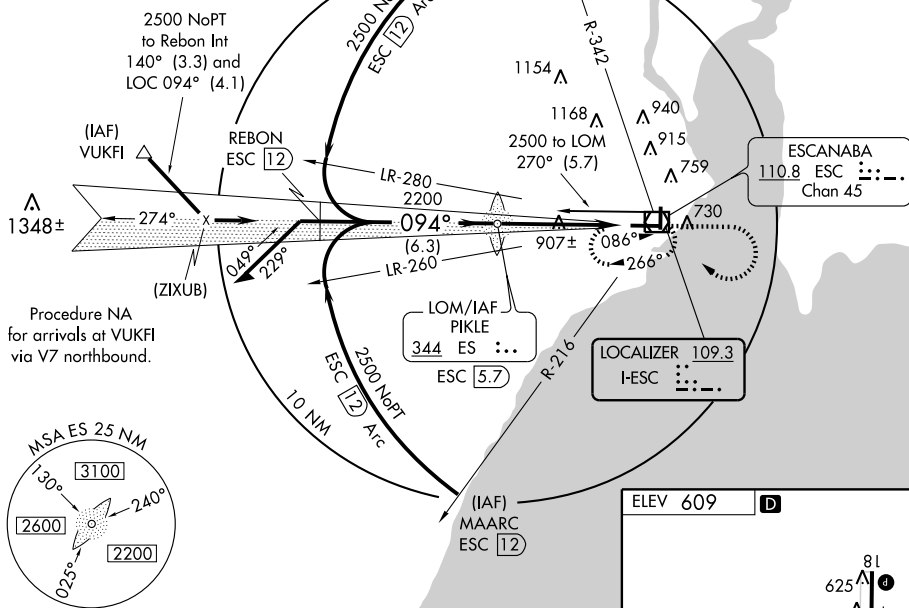
AWOS-3
121,425

MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF) **L**

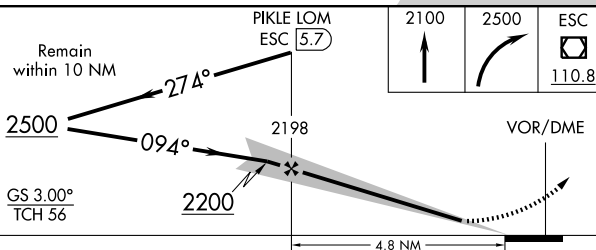
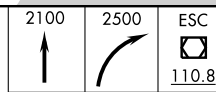
ADF or DME REQUIRED

CAUTION: Magnetic disturbances of as much as 14° exist at ground level at Escanaba.



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



CATEGORY	A	B	C	D
S-ILS 9	809-½ 200 (200-½)			
S-LOC 9	1160-½ 551 (600-½)		1160-1 551 (600-1)	1160-1¼ 551 (600-1¼)
CIRCLING	1160-1 551 (600-1)		1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-2¼)

HIRL Rwy 9-27 **L**
MIRL Rwy 18-36 **L**
REIL Rwy 36 **L**

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

ESCANABA, MICHIGAN
Amdt 2 09295

ESCANABA / DELTA COUNTY (ESC)
 ILS - LOG RMAN 2

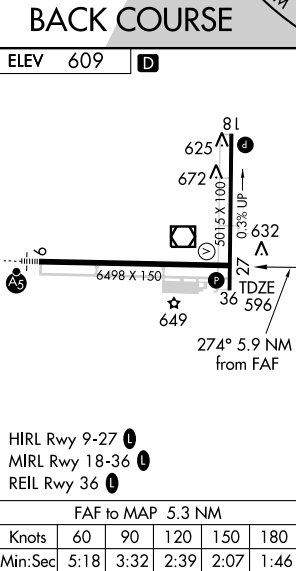
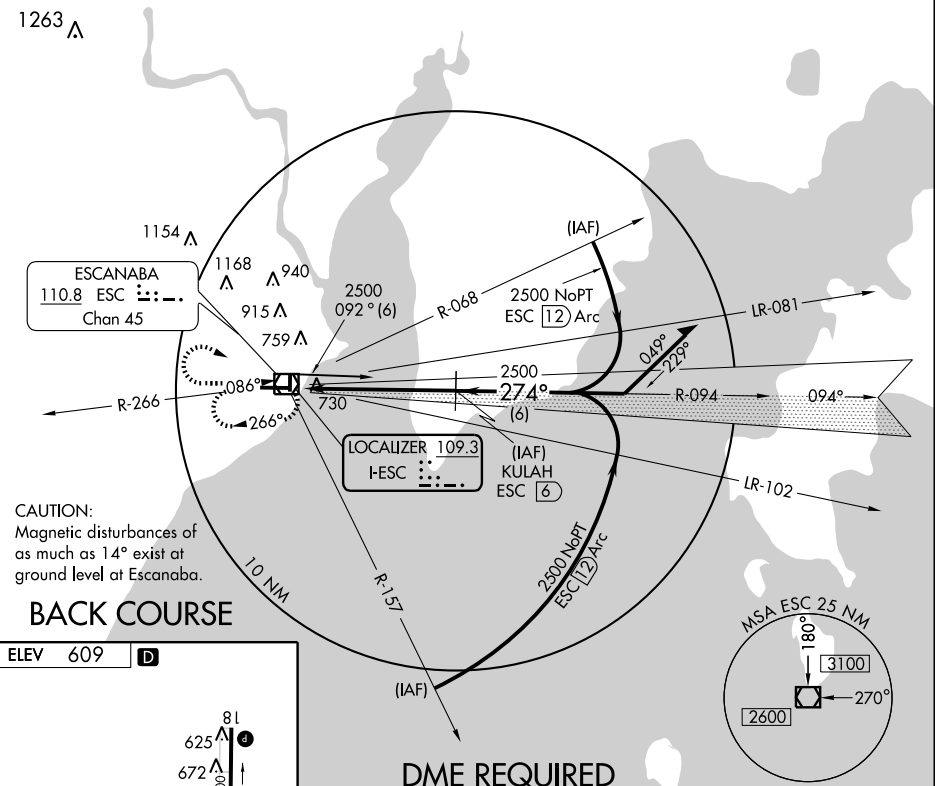
45°43'N - 87°06'W

LOC I-ESC 109.3	APP CRS 274°	Rwy ldg TDZE Apt Elev	6498 596 609
---------------------------	------------------------	-----------------------------	---

LOC BC RWY 27 ESCANABA / DELTA COUNTY (ESC)

<p>▼ ▲</p> <p>DME from ESC VOR/DME. Simultaneous reception of I-ESC and ESC DME required.</p>	<p>MISSED APPROACH: Climb to 2500 then right turn direct ESC VOR/DME and hold.</p>
---	--

<p>AWOS-3 121.425</p>	<p>MINNEAPOLIS CENTER 127.65</p>	<p>UNICOM 122.8 (CTAF) 0</p>
----------------------------------	---	---



DME REQUIRED

2500

ESC

110.8

KULAH

ESC 6

Remain within 10 NM

VOR/DME

ESC

0.8

274°

2500

≤ 2.95°

TCH 60

Disregard glide slope indications.

0.6

5.3 NM

CATEGORY	A	B	C	D
S-27	980-1 384 (400-1)			980-1¼ 384 (400-1¼)
CIRCLING	1060-1 451 (500-1)	1100-1 491 (500-1)	1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-2¼)

WAAS CH 70511 W09A	APP CRS 094°	Rwy Idg TDZE Apt Elev	6498 609 609
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 9 ESCANABA / DELTA COUNTY (ESC)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sawyer Intl altimeter setting and increase LPV DA to 987, LNAV/VNAV DA to 1145, increase all MDA 180 feet, increase LPV visibility all Cats ¼ mile, LNAV/VNAV visibility all Cats ½ mile, increase LNAV Cat C visibility ½ mile, LNAV Cat D visibility ¼ mile, increase Circling Cat C visibility ¾ mile, and Circling Cat D visibility ½ mile. For inoperative MALSR, increase LNAV Cat D visibility to 1¼. For inoperative MALSR, when using Sawyer Intl altimeter setting, increase LPV all Cats visibility to 1¼. VDP NA when using Sawyer Intl altimeter setting. Baro-VNAV NA when using Sawyer Intl altimeter setting.

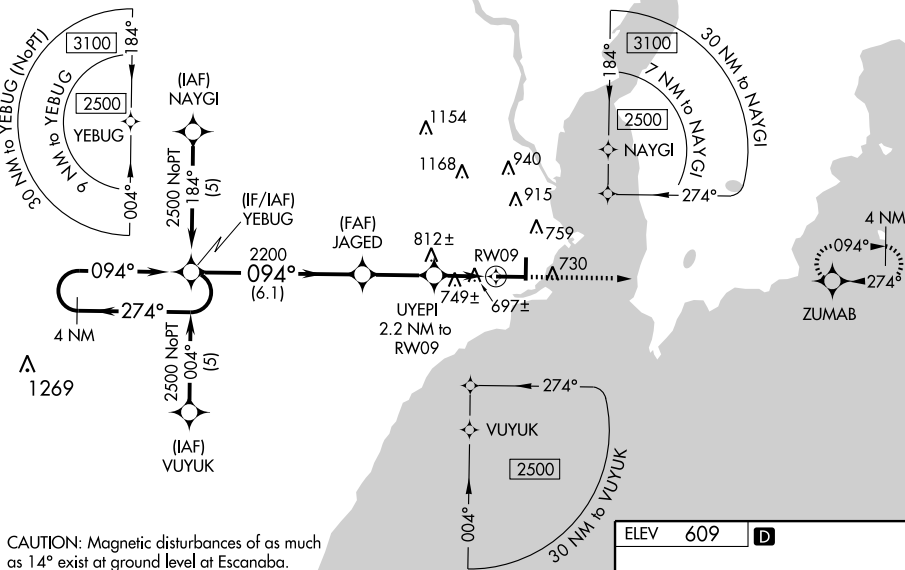


MISSED APPROACH:
Climb to 2500 direct ZUMAB and hold.

AWOS-3
121.425

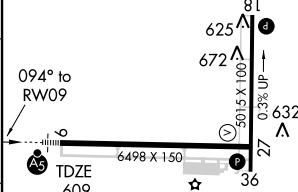
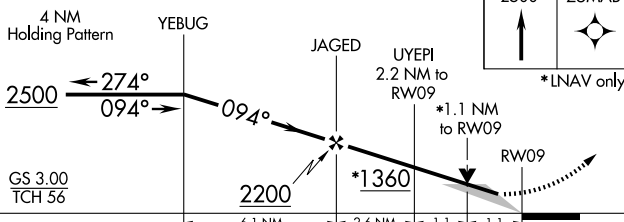
MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF) 0



CAUTION: Magnetic disturbances of as much as 14° exist at ground level at Escanaba.

ELEV **609** **D**



CATEGORY	A	B	C	D
LPV DA	809-½	200 (200-½)		
LNAV/VNAV DA	967-¾	358 (400-¾)		
LNAV MDA	1000-½	391 (400-½)	1000-1	391 (400-1)
CIRCLING	1060-1	451 (500-1)	1240-1¾	631 (700-1¾)
			1280-2¼	671 (700-1¼)

HIRL Rwy 9-27 **0**
MIRL Rwy 18-36 **0**
REIL Rwy 36 **0**

APP CRS	Rwy Idg	6498
274°	TDZE	596
	Apt Elev	609

RNAV (GPS) RWY 27

ESCANABA / DELTA COUNTY (ESC)

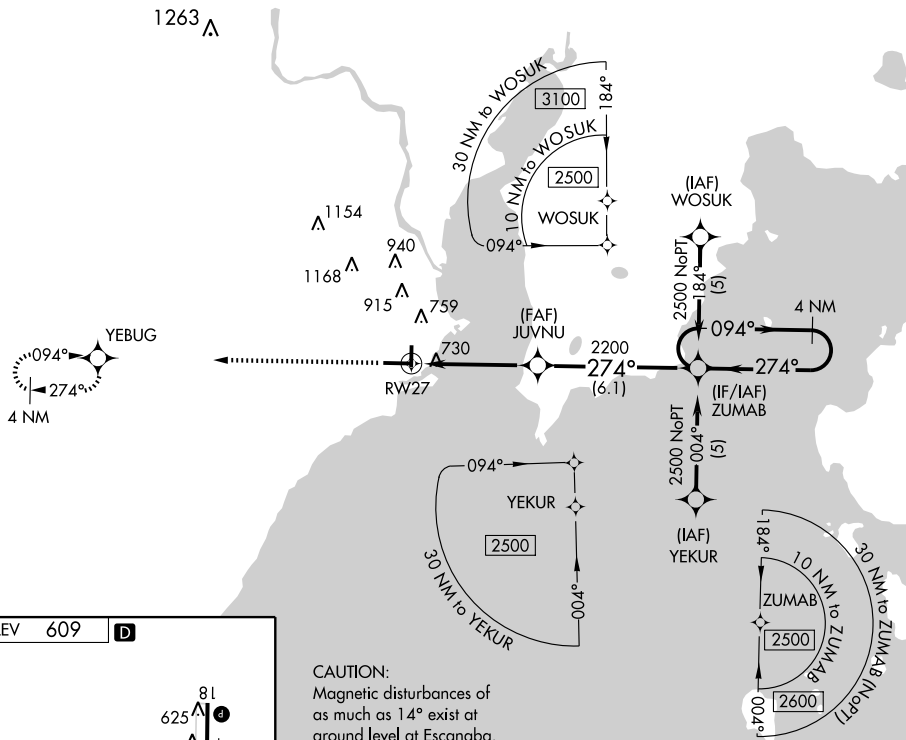
- T** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase LNAV Cat C and D visibility $\frac{1}{2}$ mile, increase Circling Cat C visibility $\frac{3}{4}$ mile, and Circling Cat D visibility $\frac{1}{2}$ mile.

MISSED APPROACH: Climb to 2500 direct YEBUG and hold.

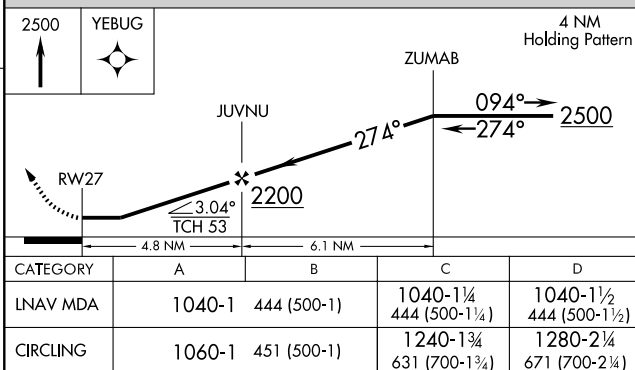
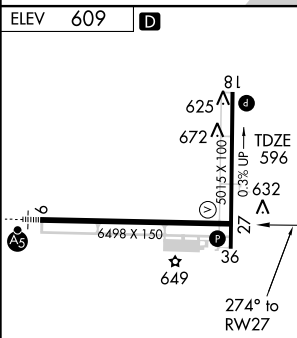
AWOS-3
121.425

MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF) **L**



CAUTION:
Magnetic disturbances of
as much as 14° exist at
ground level at Escanaba.



ESCANABA, MICHIGAN
Orig 09295

45°43'N - 87°06'W

ESCANABA / DELTA COUNTY (ESC)
RNAV (GPS) RWY 27

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME ESC 110.8 Chan 45	APP CRS 086°	Rwy Idg TDZE Apt Elev 609	6498 609
---	------------------------	---	---------------------------

VOR RWY 9

ESCANABA / DELTA COUNTY (ESC)

▼ When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase S-9 Cat B visibility $\frac{1}{4}$ mile, Cats C and D visibility $\frac{3}{4}$ mile, Circling Cat B visibility $\frac{1}{4}$ mile, Cat C visibility $\frac{3}{4}$ mile, Cat D visibility $\frac{1}{2}$ mile, increase DEPXE fix minimums S-9 Cats C and D visibility $\frac{1}{2}$ mile, Circling Cat C visibility $\frac{3}{4}$ mile, Cat D visibility $\frac{1}{2}$ mile. VDP NA when using Sawyer Intl altimeter setting.

MALSRL

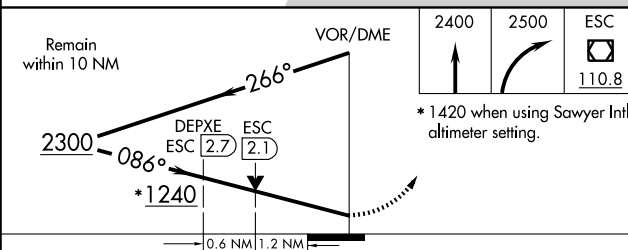
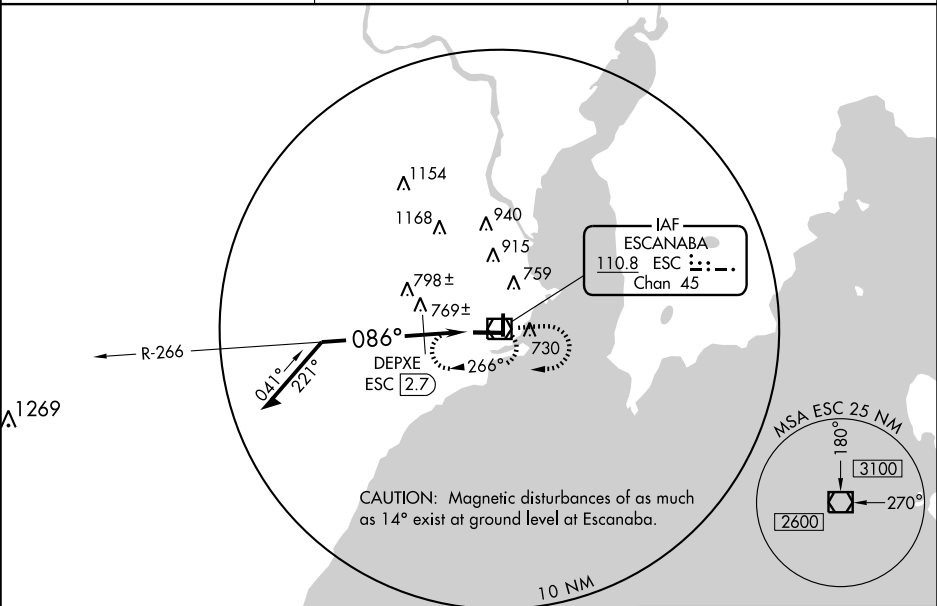


MISSED APPROACH:
Climb to 2400 then climbing right turn to 2500 direct ESC VOR/DME and hold.

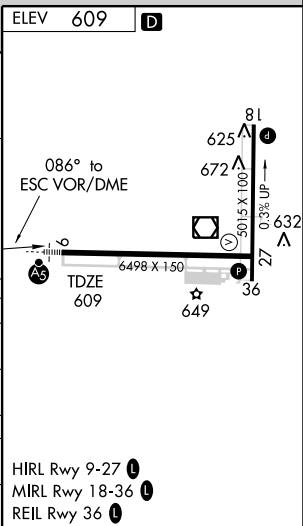
AWOS-3
121.425

MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF)



CATEGORY	A	B	C	D
S-9	1240- $\frac{1}{2}$ 631 (700- $\frac{1}{2}$)		1240-1 $\frac{1}{4}$ 631 (700-1 $\frac{1}{4}$)	1240-1 $\frac{1}{2}$ 631 (700-1 $\frac{1}{2}$)
CIRCLING	1240-1 631 (700-1)		1240-1 $\frac{3}{4}$ 631 (700-1 $\frac{3}{4}$)	1280-2 $\frac{1}{4}$ 671 (700-2 $\frac{1}{4}$)
DEPXE FIX MINIMUMS				
S-9	1040 - $\frac{1}{2}$ 431 (500- $\frac{1}{2}$)		1040- $\frac{3}{4}$ 431 (500- $\frac{3}{4}$)	1040-1 431 (500-1)
CIRCLING	1060 -1 451 (500-1)		1240-1 $\frac{3}{4}$ 631 (700-1 $\frac{3}{4}$)	1280-2 $\frac{1}{4}$ 671 (700-2 $\frac{1}{4}$)



VOR/DME ESC 110.8 Chan 45	APP CRS 282°	Rwy Ldg TDZE Apt Elev	6498 596 609
---	------------------------	-----------------------------	---

VOR RWY 27

ESCANABA / DELTA COUNTY (ESC)

V Visibility reduction by helicopters NA.
A When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase S-9 Cat C and D visibility ½ mile, Circling Cat C visibility ¾ mile, Cat D visibility ½ mile.

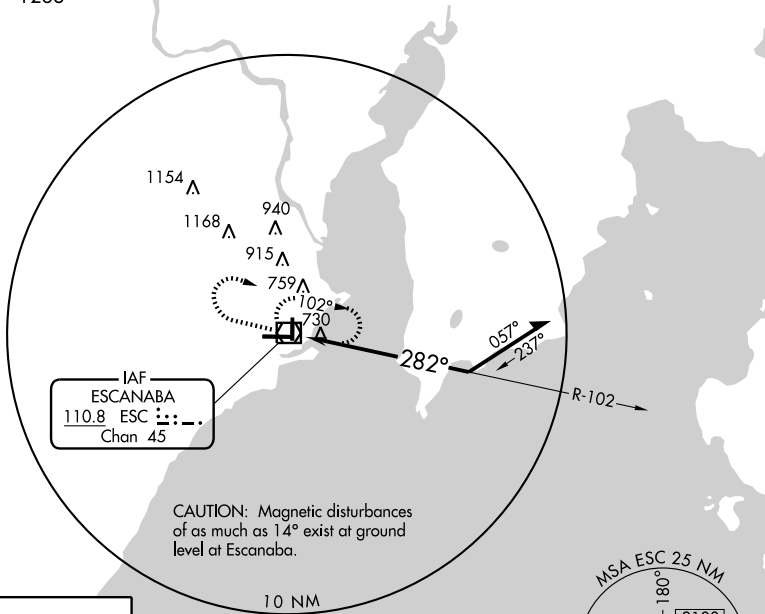
MISSED APPROACH: Climb to 2400 then climbing right turn to 2500 direct ESC VOR/DME and hold.

AWOS-3
121.425

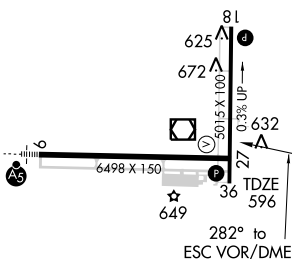
MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF) **0**

1263 **A**



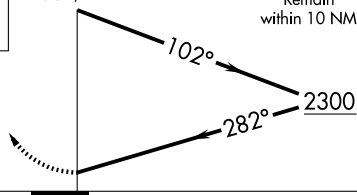
ELEV 609 **D**



2400	2500	ESC
↑	↪	110.8

VOR/DME

Remain within 10 NM



CATEGORY	A	B	C	D
S-27	1080 -1	484 (500-1)	1080 -1¼ 484 (500-1¼)	1080 -1½ 484 (500-1½)
CIRCLING	1080 -1	471 (500-1)	1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-2¼)

VOR/DME ESC 110.8 Chan 45	APP CRS 351°	Rwy Idg TDZE Apt Elev	5015 601 609
---	------------------------	-----------------------------	---

VOR RWY 36

ESCANABA / DELTA COUNTY (ESC)



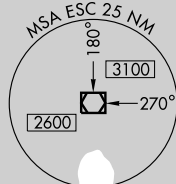
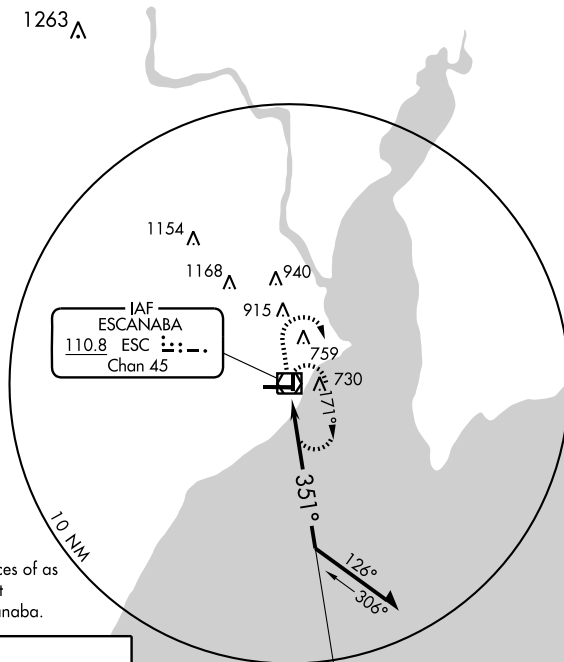
MISSED APPROACH: Climb to 2400, then right turn direct ESC VOR/DME and hold.

AWOS-3
121.425

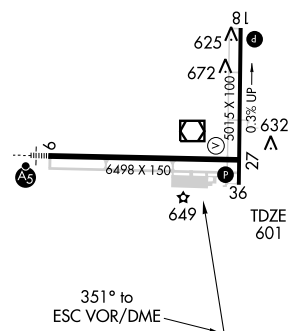
MINNEAPOLIS CENTER
127.65

UNICOM
122.8 (CTAF) 0

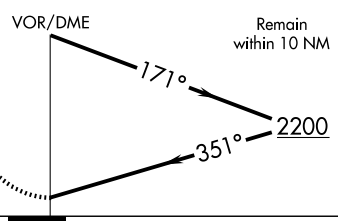
1263



ELEV 609



2400		ESC 110.8
------	--	------------------



CATEGORY	A	B	C	D
S-36	1080-1 479 (500-1)		1080-1 1/4 479 (500-1 1/4)	1080-1 1/2 479 (500-1 1/2)
CIRCLING	1080-1 471 (500-1)	1100-1 491 (500-1)	1240-1 631 (700-1 3/4)	1280-2 1/4 671 (700-2 1/4)

HIRL Rwy 9-27
MRL Rwy 18-36
REIL Rwy 36

AIRPORT DIAGRAM

AL-618 (FAA)

FLINT / BISHOP INTL (FNT)
FLINT, MICHIGAN

ATIS
133.15
FLINT TOWER ★
126.3 257.9
GND CON
121.9
CLNC DEL
121.75

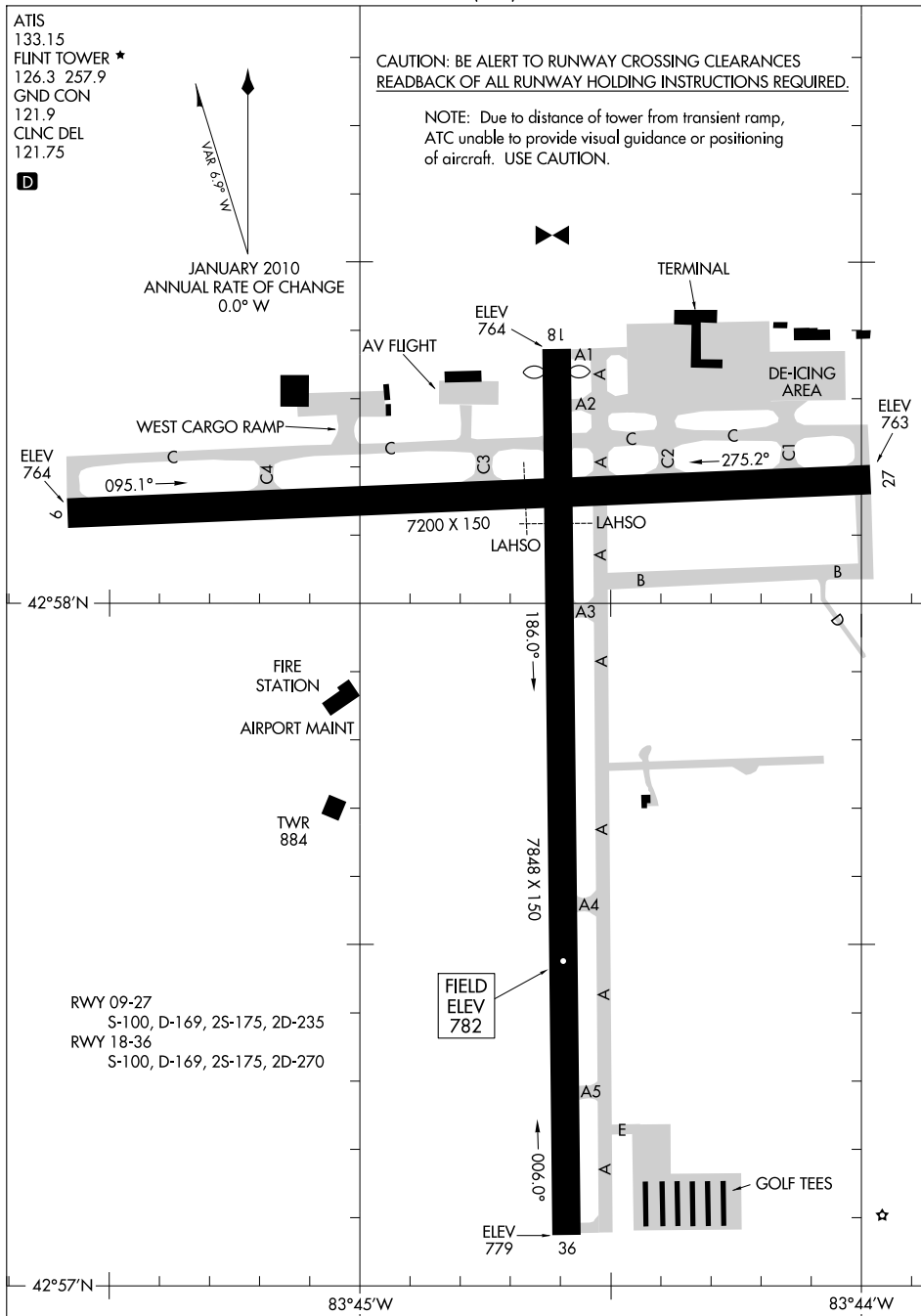
D

JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS REQUIRED.

NOTE: Due to distance of tower from transient ramp,
ATC unable to provide visual guidance or positioning
of aircraft. USE CAUTION.

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

FLINT, MICHIGAN
FLINT / BISHOP INTL (FNT)

FLINT

BISHOP INTL (FNT) 3 SW UTC-5(-4DT) N42°57.93' W83°44.62'

DETROIT

782 B S4 FUEL 100LL, JET A TPA—See Remarks AOE Class I, ARFF Index B
NOTAM FILE FNTH-106, 11A, L-28J
IAP, AD

RWY 18-36: H7848X150 (ASPH-PFC) S-100, D-169, 2S-175, 2D-270 HIRL

RWY 18: VASI(V4L)—GA 3.0° TCH 41'. Thld dsplcd 200'. Tree.

RWY 36: VASI(V4L)—GA 3.0° TCH 54'. Tree.

RWY 09-27: H7200X150 (ASPH-PFC) S-100, D-169, 2S-175,
2D-235 HIRLRWY 09: MALSR. Trees. RWY 27: MALSR. VASI(V4L)—GA 3.0°
TCH 56'. Trees.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 09	18-36	4100
RWY 36	09-27	6300

RUNWAY DECLARED DISTANCE INFORMATION

RWY 18: TORA-7848 TODA-7848 ASDA-7848 LDA-7648

RWY 36: TORA-7848 TODA-7848 ASDA-7648 LDA-7648

AIRPORT REMARKS: Attended continuously. Birds and deer on and in/ov
arpt. TPA-1582(800) single-engine, 1982(1200) multi-engine
acft. ACTIVATE MALSR Rwy 09-27—CTAF. Rwy lgts preset—no ints
change avbl when twr clsd.

WEATHER DATA SOURCES: ASOS (810) 232-4477.

COMMUNICATIONS: CTAF 126.3 ATIS 133.15 UNICOM 122.95

FLINT RCO 122.3 (LANSING RADIO)

⑦ FLINT APP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) 133.8 (1045-0430Z‡)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z‡)

FLINT TOWER 126.3 (1045-0430Z‡) GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS C svc 1045-0430Z‡ ctc APP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) other times
CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' at fld. 772/6W.

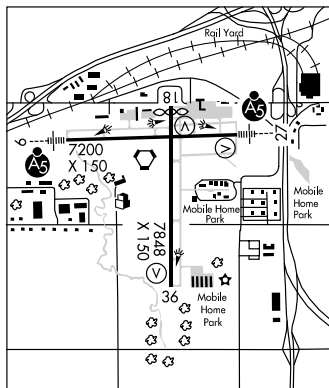
PETLI NDB (LOM) 269 FN N42°58.09' W83°53.41' 097° 6.5 NM to fld.

ILS 109.9 I-FNT Rwy 09. LOM PETLI NDB.

ILS 109.9 I-TUN Rwy 27. Class IB.

ASR (1045-0430Z‡)

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr. ILS Rwy 09, 27 and NDB unmonitored when twr clsd.



FLUSHING

DALTON (3DA) 2 E UTC-5(-4DT) N43°03.15' W83°48.29'

DETROIT

733 B FUEL: 100LL NOTAM FILE LAN

RWY 18-36: H2510X50 (ASPH) LIRL

RWY 18: Thld dsplcd 771'. Tree. RWY 36: Thld dsplcd 771'. Trees.

RWY 09-27: 1633X130 (TURF)

RWY 09: Tree. RWY 27: Thld dsplcd 293'. Road.

AIRPORT REMARKS: Attended irregularly. Fuel available by credit card. Rwy 09-27 CLOSED Oct through Mar. Rwy
09-27 CLOSED to transient acft permanently. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy
18-36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8



FLYING-A-RANCH (See FRUITPORT)

FLYING M RANCH (See LINCOLN)

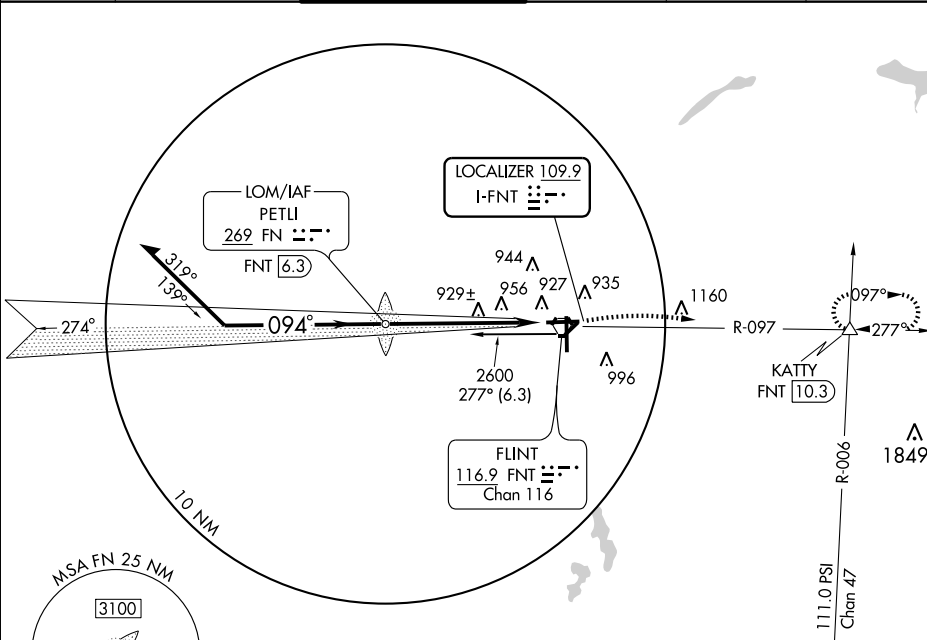
FORD (See IRON MOUNTAIN/KINGSFORD)


LOC I-FNT 109.9	APP CRS 094°	Rwy ldg 7200 TDZE 771 Apt Elev 782
---------------------------	------------------------	--

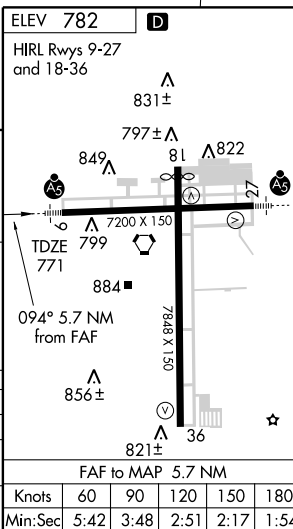
ILS or LOC RWY 9 FLINT / BISHOP INTL (FNT)

 ASR RVR 1800 authorized with the use of FD or AP or HUD to DA.	MALSR 	MISSED APPROACH: Climb to 1500, then climbing right turn to 3000 via FNT R-097 to KATTY INT/FNT 10.3 DME and hold.
---	---	---

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
------------------------------	--	---	--------------------------------	----------------------------------	--------------------------------



GS 2.80° TCH 59	PETLI LOM FNT 6.3	1500 3000 FNT R-097	KATTY 
Remain within 10 NM	2600 2560	2600 277° (6.3)	2600 277° (6.3)
5.7 NM	5.7 NM	5.7 NM	5.7 NM
CATEGORY	A	B	C
S-ILS 9	971/24	200 (200-½)	
S-LOC 9	1180/24	409 (400-½)	1180/40
CIRCLING	1300 - 1	518 (600-1)	1300 - 1½
		518 (600-1½)	1340-2
			558 (600-2)



LOC I-TUN 109.9	APP CRS 274°	Rwy Idg 7200 TDZE 770 Apt Elev 782
---------------------------	------------------------	---

ILS or LOC RWY 27 FLINT/BISHOP INTL (FNT)

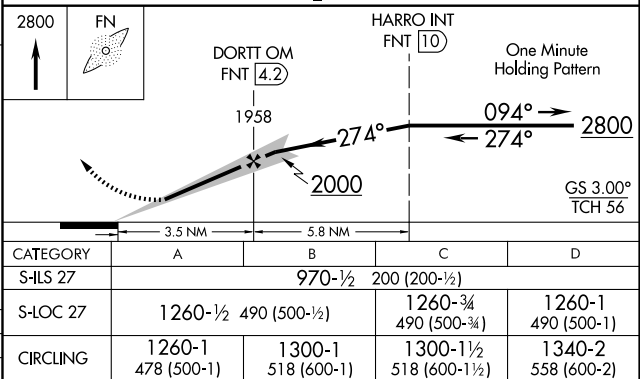
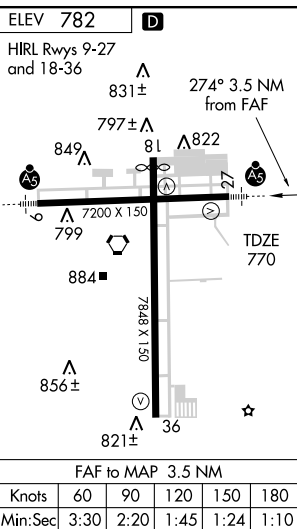
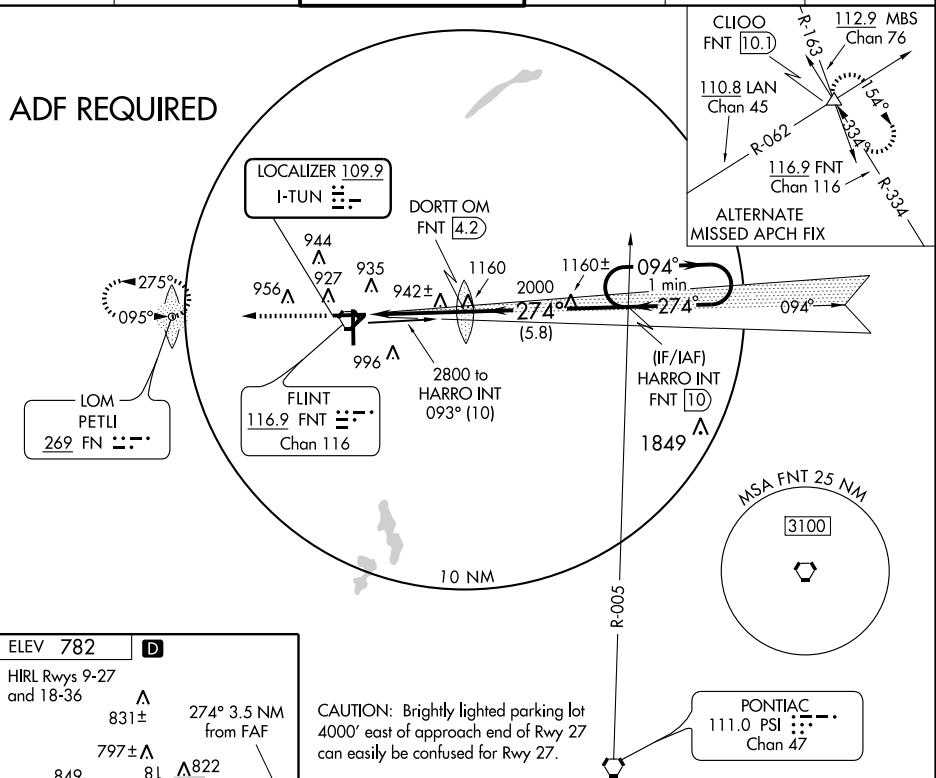
V When local altimeter setting not received, use Owosso altimeter setting and increase all DA 47 feet and all MDA 60 feet, and S-LOC 27 visibilities Cat C/D ¼ mile.
A ASR



MISSED APPROACH: Climb to 2800 direct PETLI LOM and hold or as directed by ATC.

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------

ADF REQUIRED



WAAS CH 45714 W09A	APP CRS 094°	Rwy ldg 7200 TDZE 771 Apt Elev 782
--	------------------------	---

RNAV (GPS) RWY 9

FLINT / BISHOP INTL (FNT)



ASR

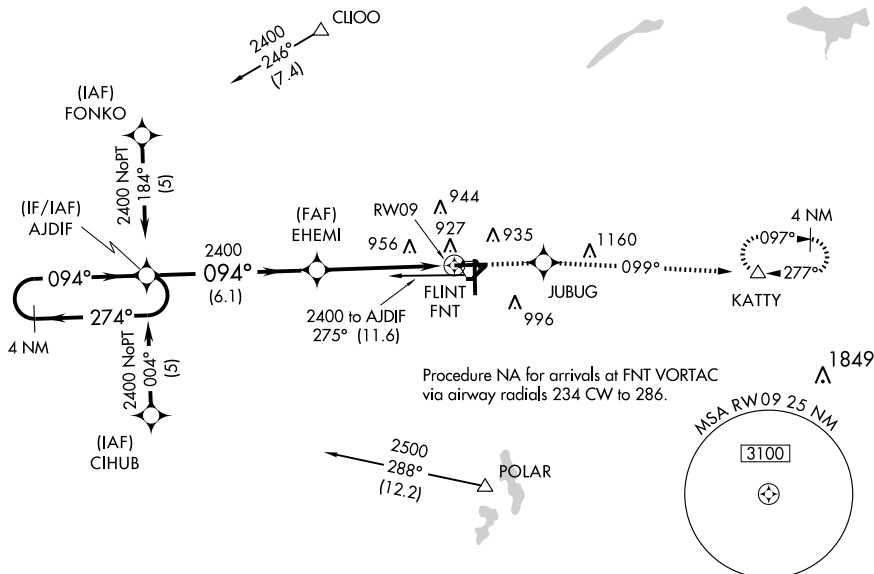
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP -0.3 NA.

MALSR



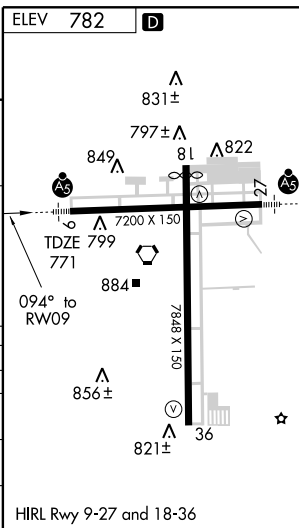
MISSED APPROACH: Climb to 3000 direct JUBUG and via track 099° to KATTY and hold.

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 0 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------



CAUTION: Brightly lit parking lot 4000' east of approach end of Rwy 27 can easily be confused for Rwy 27.

4 NM Holding Pattern				
AJDIF		EHEMI		
2400 ← 274°		3000 ↑		JUBUG
094° →		2400		TRK 099°
GS 3.00°		*1.4 NM to RW09		*LNAV only
TCH 50		RW09		KATTY
		6.1 NM		
		3.5 NM		
		1.4		
CATEGORY	A	B	C	D
LPV DA	971/24		200 (200-1/2)	
LNAV/VNAV DA	1227/50		456 (500-1)	
LNAV MDA	1260/24	489 (500-1/2)	1260/40	1260/50
			489 (500-3/4)	489 (500-1)
CIRCLING	1300-1	518 (600-1)	1300-1 1/2	1340-2
			518 (600-1 1/2)	558 (600-2)



WAAS CH 99514 W18A	APP CRS 185°	Rwy ldg TDZE 776 Apt Elev 782
--	------------------------	---

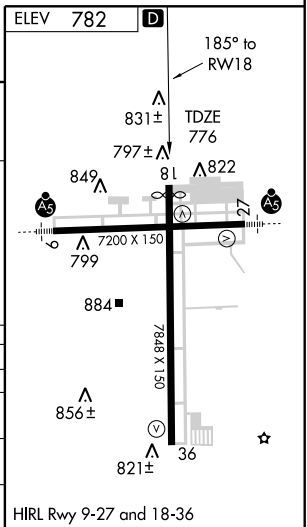
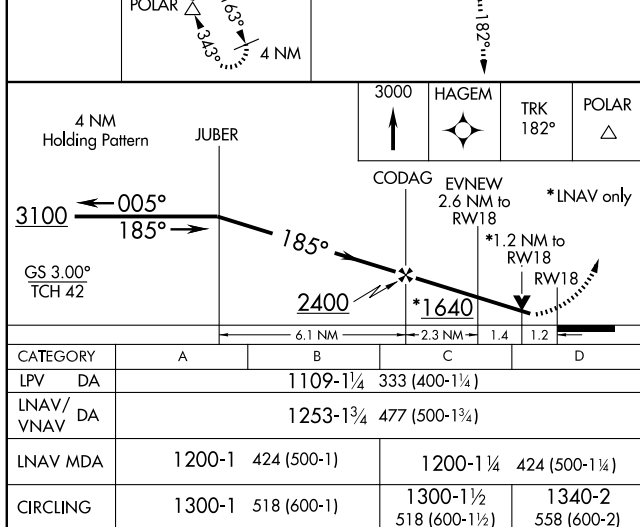
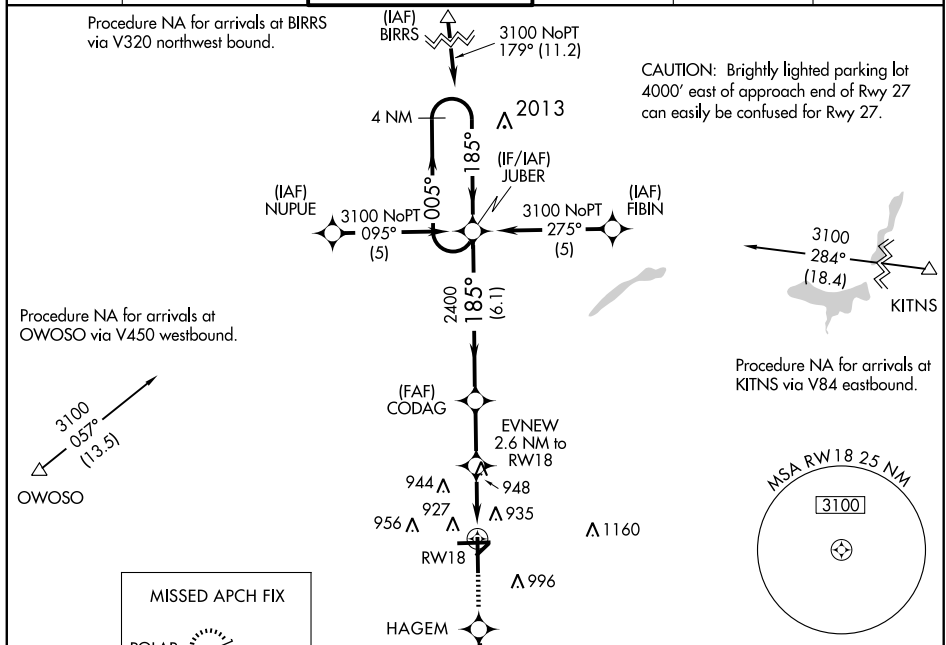
RNAV (GPS) RWY 18

FLINT / BISHOP INTL (FNT)

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct HAGEM and via track 182° to POLAR and hold.

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------



WAAS CH 72810 W27A	APP CRS 274°	Rwy Idg 7200 TDZE 770 Apt Elev 782
--	------------------------	---

RNAV (GPS) RWY 27

FLINT / BISHOP INTL (FNT)



When local altimeter setting not received, use Owsos altimeter setting and increase all DA 47 feet, and all MDA 60 feet; and LNAV visibilities Cat C/D $\frac{1}{4}$ mile. VDP NA when using Owsos altimeter setting. Baro-VNAV NA when using Owsos altimeter setting.

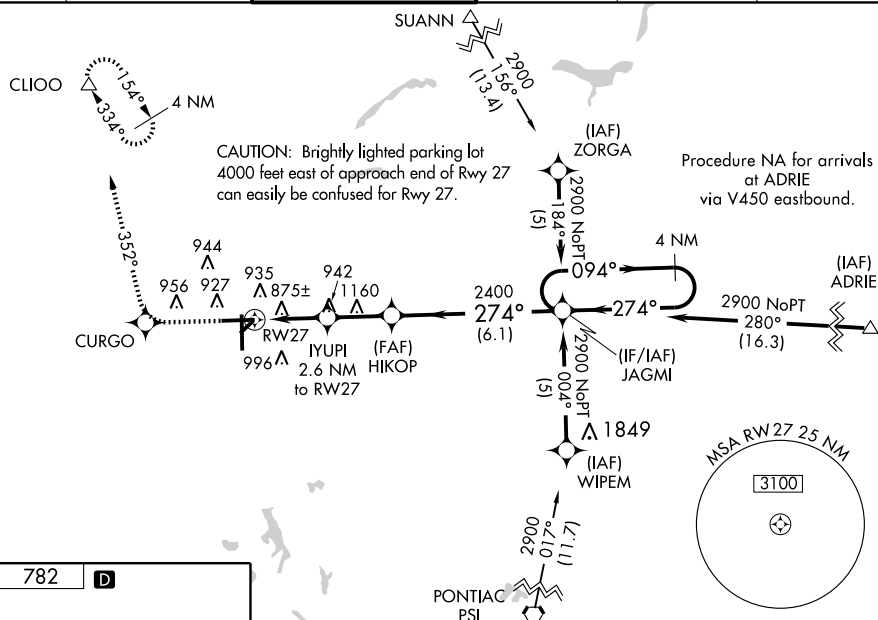
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). For inoperative MALSR, decrease LPV all Cats visibility to $\frac{1}{4}$. DME/DEME RNP-0.3 NA.

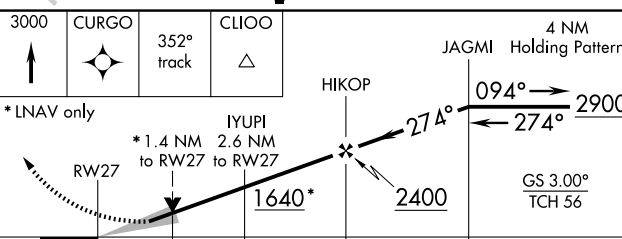
MALSR



MISSED APPROACH:
Climb to 3000 direct CURGO
and via 352° track to CLIOO
and hold.

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 0 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
----------------	--------------------------------	---------------------------------------	------------------	--------------------	------------------



3000 ↑	CURGO ✦	352° track	CLIOO △			
* LNAV only						
RW27						
* 1.4 NM to RW27				2.6 NM to RW27		
IYUPI				HIKOP		
1640*				2400		
JAGMI				4 NM Holding Pattern		
094° →				2900		
← 274°						
GS 3.00°				TCH 56		
CATEGORY		A	B	C	D	
LPV	DA	1098 - ¾		328 (400-¾)		
LNAV/ VNAV	DA	1240 - 1¼		470 (500-1¼)		
LNAV MDA	1260 - ½		490 (500-½)		1260 - ¾ 490 (500-¾)	1260 - 1 490 (500-1)
CIRCLING	1260 - 1 478 (500-1)	1300 - 1 518 (600-1)	1300 - 1½ 518 (600-1½)		1340 - 2 558 (600-2)	

WAAS CH 65914 W36A	APP CRS 005°	Rwy Idg TDZE Apt Elev	7648 782 782
--	------------------------	-----------------------------	---

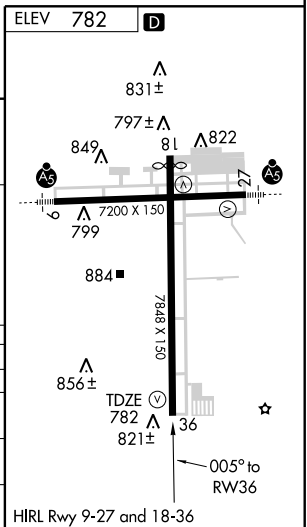
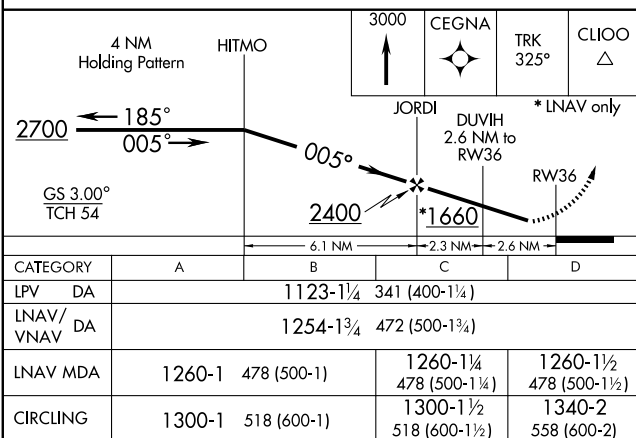
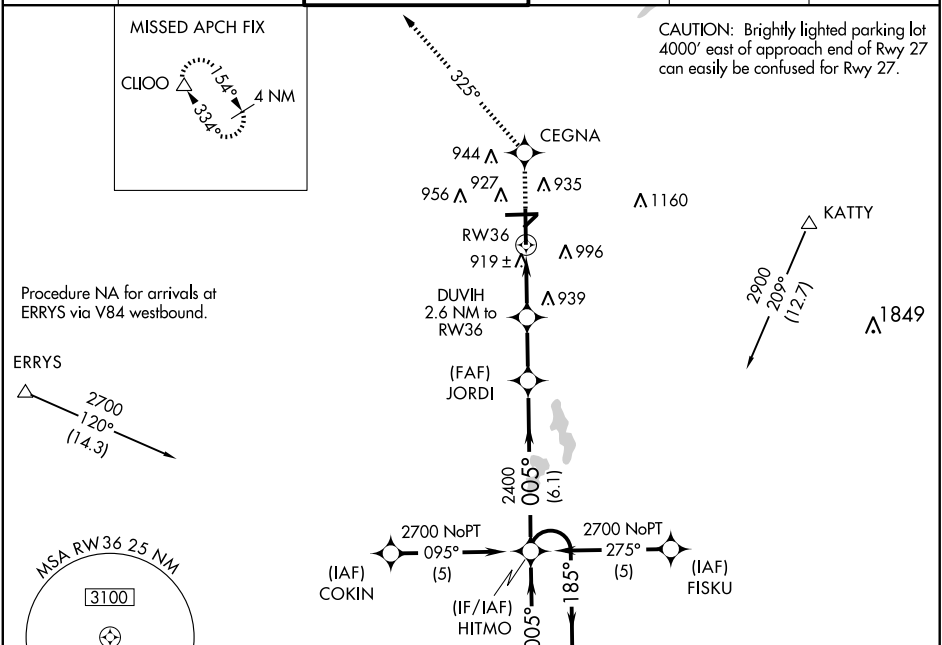
RNAV (GPS) RWY 36

FLINT / BISHOP INTL (FNT)

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct CEGNA and via track 325° to CLIOO and hold.

ATIS 133.15	FLINT APP CON ★ 118.8 257.9	FLINT TOWER ★ 126.3 (CTAF) 257.9	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------



VORTAC FNT 116.9 Chan 116	APP CRS 102°	Rwy ldg TDZE Apt Elev	7200 771 782
---	------------------------	-----------------------------	---

VOR RWY 9
FLINT / BISHOP INTL (FNT)

ASR



MISSED APPROACH: Climb to 3000 via FNT R-097 to KATTY INT/FNT 10.3 DME and hold.

ATIS
133.15

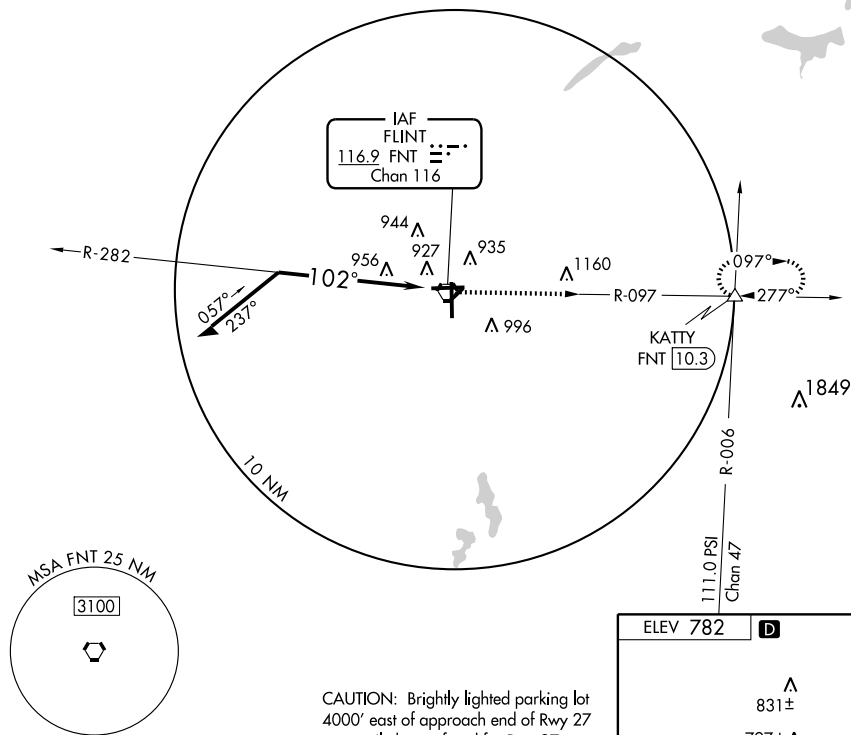
FLINT APP CON ★
118.8 257.9

FLINT TOWER ★
126.3 (CTAF) 257.9

GND CON
121.9

CLNC DEL
121.75

UNICOM
122.95



Remain
within 10 NM

VORTAC

2200

282°

102°

3000

FNT R-097

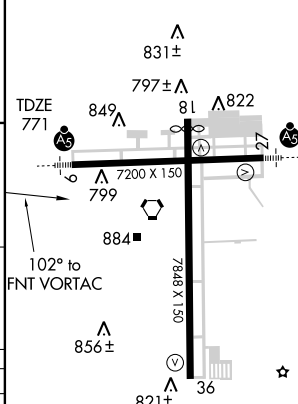
116.9

KATTY

△

ELEV 782

D



HIRL Rwy 9-27 and 18-36

CATEGORY	A	B	C	D
S-9	1300/24 529 (500-½)		1300/50 529 (600-1)	1300/60 529 (600-1¼)
CIRCLING	1300-1 518 (600-1)		1300-1½ 518 (600-1½)	1340-2 558 (600-2)

VORTAC FNT 116.9 Chan 116	APP CRS 196°	Rwy Idg TDZE 779 Apt Elev 782
---	------------------------	---

VOR RWY 18 FLINT / BISHOP INTL (FNT)

ASR

MISSED APPROACH: Climbing left turn to 3000
via FNT R-097 to KATY INT and hold.

ATIS
133.15

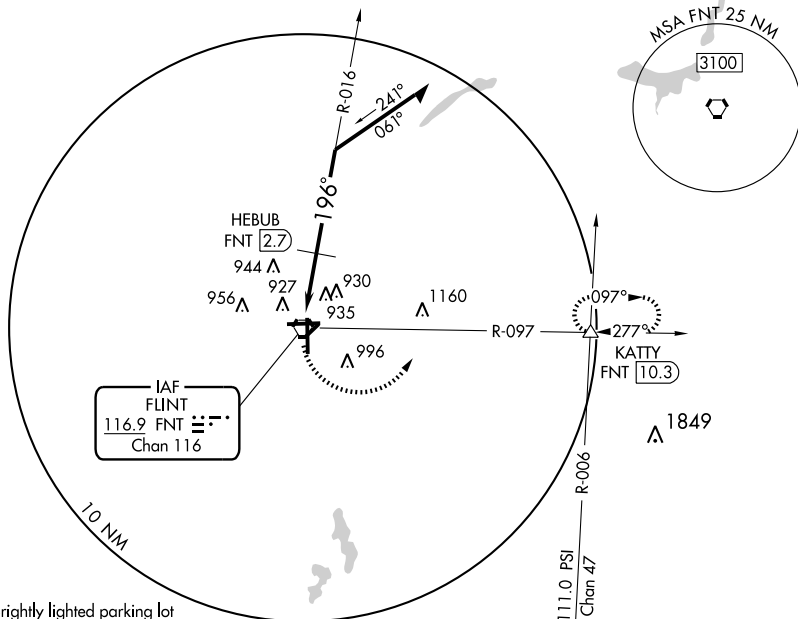
FLINT APP CON ★
118.8 257.9

FLINT TOWER ★
126.3 (CTAF) 257.9

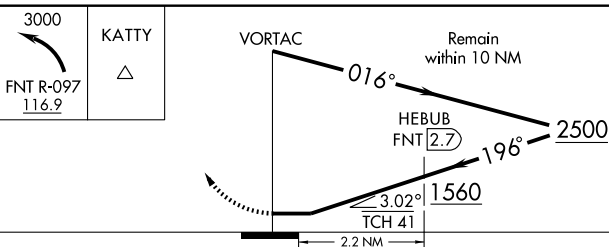
GND CON
121.9

CLNC DEL
121.75

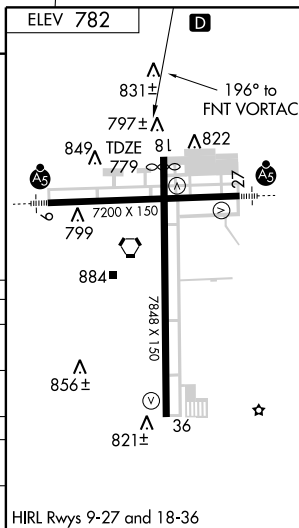
UNICOM
122.95



CAUTION: Brightly lighted parking lot
4000' east of approach end of Rwy 27
can easily be confused for Rwy 27.



CATEGORY	A	B	C	D
S-18	1560 - 1 781 (800-1)	1560 - 1 ¼ 781 (800-1 ¼)	1560 - 2 ¼ 781 (800-2 ¼)	1560 - 2 ½ 781 (800-2 ½)
CIRCLING	1560 - 1 778 (800-1)	1560 - 1 ¼ 778 (800-1 ¼)	1560 - 2 ¼ 778 (800-2 ¼)	1560 - 2 ½ 778 (800-2 ½)
DME MINIMUMS				
S-18	1300 - 1 523 (600-1)	1300-1 ½ 523 (600-1 ½)	1300-1 ¾ 523 (600-1 ¾)	1300-2 523 (600-2)
CIRCLING	1300 - 1 518 (600-1)	1300 - 1 518 (600-1)	1300-1 ½ 518 (600-1 ½)	1340-2 558 (600-2)



HIRL Rwy 9-27 and 18-36

VORTAC FNT 116.9 Chan 116	APP CRS 267°	Rwy ldg TDZE Apt Elev	7200 770 782
---	------------------------	-----------------------------	---

VOR RWY 27

FLINT / BISHOP INTL (FNT)

ASR



MISSED APPROACH: Climbing right turn to 3000 via FNT R-334 to CLIOO INT and hold.

ATIS
133.15

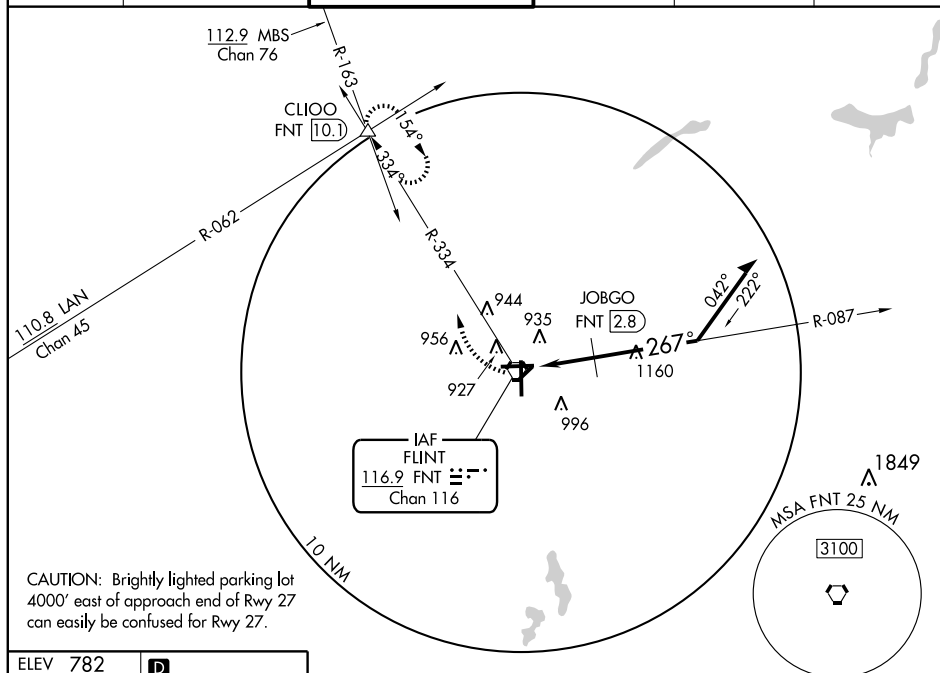
FLINT APP CON ★
118.8 257.9

FLINT TOWER ★
126.3 (CTAF) 257.9

GND CON
121.9

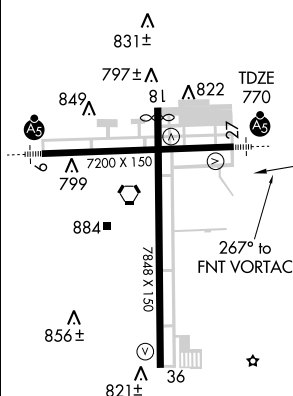
CLNC DEL
121.75

UNICOM
122.95



ELEV 782

D



HIRL Rwy 9-27 and 18-36

3000

CLIOO

△

FNT R-334

116.9

VORTAC

087°

Remain within 10 NM

JOBGO

FNT 2.8

267°

2500

2.97°

1500

TCH 56

2.2 NM

CATEGORY	A	B	C	D
S-27	1500 - ½	730 (800-½)	1500 - 1½ 730 (800-1½)	1500 - 1¾ 730 (800-1¾)
CIRCLING	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2¼ 718 (800-2¼)
DME MINIMUMS				
S-27	1260 - ½	490 (500-½)	1260 - ¾ 490 (500-¾)	1260 - 1 490 (500-1)
CIRCLING	1280 - 1 498 (500-1)	1300 - 1 518 (600-1)	1300 - 1½ 518 (600-1½)	1340-2 558 (600-2)

FLINT, MICHIGAN

Orig 09351

42°58'N - 83°45'W

FLINT / BISHOP INTL (FNT)

VOR RWY 27

VORTAC FNT 116.9 Chan 116	APP CRS 359°	Rwy ldg 7648 TDZE 782 Apt Elev 782
---	------------------------	---

VOR RWY 36

FLINT / BISHOP INTL (FNT)



MISSED APPROACH: Climbing right turn to 3000
via FNT R-097 to KATY INT/10.3 DME and hold.

ATIS
133.15

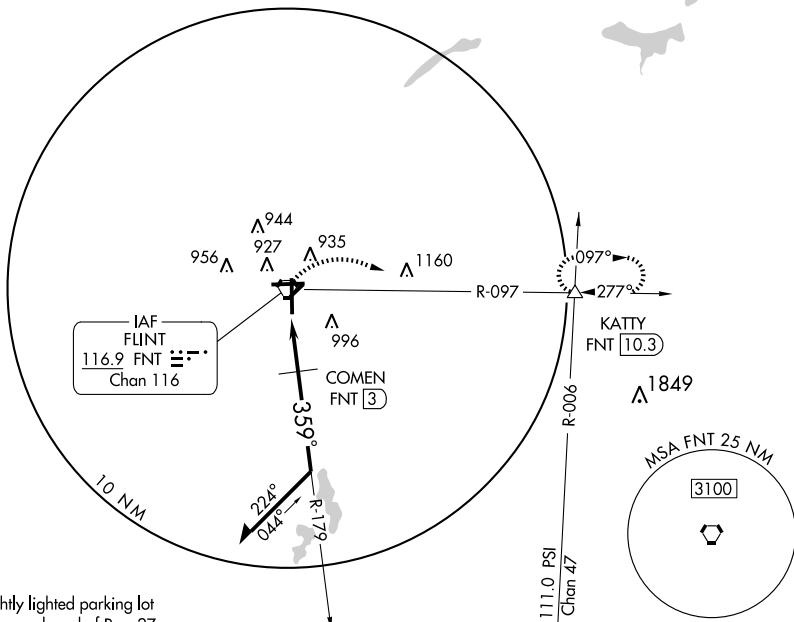
FLINT APP CON ★
118.8 257.9

FLINT TOWER ★
126.3 (CTAF) 257.9

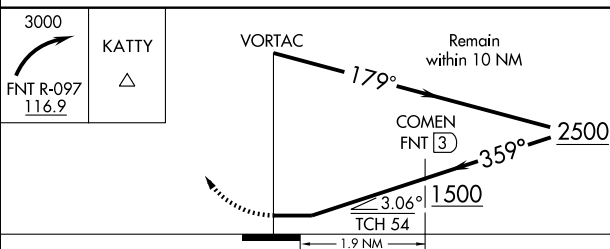
GND CON
121.9

CLNC DEL
121.75

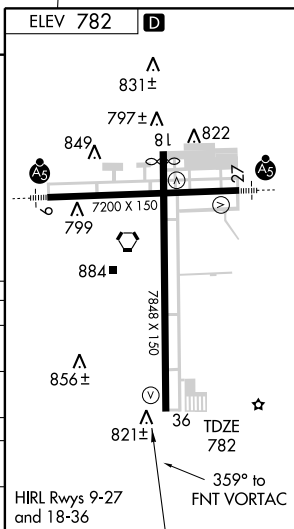
UNICOM
122.95



CAUTION: Brightly lighted parking lot
4000' east of approach end of Rwy 27
can easily be confused for Rwy 27.



CATEGORY	A	B	C	D
S-36	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2 1/4 718 (800-2 1/4)
CIRCLING	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2 1/4 718 (800-2 1/4)
DME MINIMUMS				
S-36	1200 - 1	418 (500-1)	1200-1 1/4	418 (500-1 1/4)
CIRCLING	1280 - 1 498 (500-1)	1300 - 1 518 (600-1)	1300 - 1 1/2 518 (600-1 1/2)	1340-2 558 (600-2)



FOWLerville

MAPLE GROVE (65G) 3 N UTC-5(-4DT) N42°43.04' W84°03.75'

DETROIT
COPTER

908 S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: 3050X110 (TURF) LIRL

RWY 09: Thld dsplcd 200'. Ground.

RWY 27: Thld dsplcd 300'. Road.

RWY 18-36: 2000X113 (TURF)

RWY 18: Thld dsplcd 550'. P-line.

RWY 36: Thld dsplcd 275'. Road.

AIRPORT REMARKS: Attended irregularly. Parachute Jumping. Maple Grove Arpt is collocated with Maple Grove Heliport be alert for rotary wing acft. Extensive acft training, two-way radio communications rgr. ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09-27 marked with 8 by 12 inch reflective cylinders and 3' cones; dsplcd thld marked with three 3' yellow cones. Rwy 09-27 and Rwy 18-36 and dsplcd thlds marked with cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

MAPLE GROVE HELIPORT (E66) 4 N UTC-5(-4DT) N42°43.03' W84°03.72'

DETROIT
COPTER

908 S4 NOTAM FILE LAN

HELIPAD H1: H32X32 (TURF)

HELIPAD H2: H12X12 (CONC)

HELIPAD H3: H20X20 (MATS)

HELIPORT REMARKS: Attended 1400-2200Z+. Maple Grove Heliport is collocated with Maple Grove Arpt, be alert for fixed wing acft. Extensive aircraft training, two-way communications required. Helipad H2 marked with cones. H1 gnd level helipad. H2 gnd level helipad. H3 raised level helipad. Max gross weight 3000 lbs. ACTIVATE H2 and H3 perimeter lgts and NSTD TRCV-123.025. H1, H2 and H3 FATO 70'x70'. Helipad H2 TRCV shines E. Helipad H3 TRCV shine N. Helipad H1 perimeter lgts. Helipad H2 and Helipad H3 NSTD TRCV.

COMMUNICATIONS: CTAF 122.8

FRANKENMUTH

WM "TINY" ZEHNDER FLD (66G) 2 SE UTC-5(-4DT) N43°18.84' W83°42.58'

DETROIT

645 NOTAM FILE LAN

RWY 09-27: 2530X100 (TURF)

RWY 09: Thld dsplcd 400'. Road.

RWY 27: P-line.

AIRPORT REMARKS: Attended irregularly. Snow removal intermittent; verify condition call 989-652-3652 or 989-652-9371. Rwy 09-27 soft in spring and after heavy rain. Rwy 09, 7' ditch 60' from thld. Rwy 09-27 marked with 3' yellow cones including Rwy 09 dsplcd thld. Rwy 09-27 LIRL not for public use.

COMMUNICATIONS: CTAF 122.9

FRANKFORT DOW MEMORIAL FIELD (FKS) 2 SE UTC-5(-4DT) N44°37.51' W86°12.05'

GREEN BAY
L-31B
IAP

633 B FUEL 100LL NOTAM FILE LAN

RWY 15-33: H4050X75 (ASPH) S-25 MIRL 0.7% up NW

RWY 15: Thld dsplcd 1094'. Road.

RWY 33: REIL. PAPI(P2R)—GA 3.0° TCH 25'. Thld dsplcd 111'.

Trees.

AIRPORT REMARKS: Unattended. Fuel self-service with major credit card. Extensive soaring activity and glider towing ops W of rwy. Radio controlled model acft opr W of rwy. Deer and birds on and in/ov arpt. Arpt bcn located on hill 1.25 miles NW of arpt. ACTIVATE MIRL Rwy 15-33; REIL Rwy 33; PAPI Rwy 33—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.325 (231) 352-7573.

COMMUNICATIONS: CTAF/UNICOM 123.05

® MINNEAPOLIS CENTER APP/DEP CON 132.9

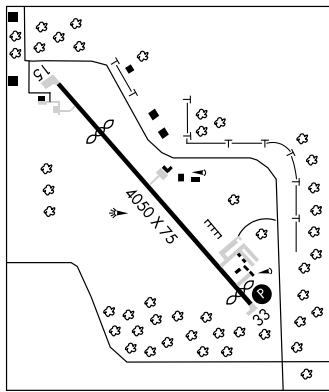
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 011° 21.4 NM to fld. 618/5W.

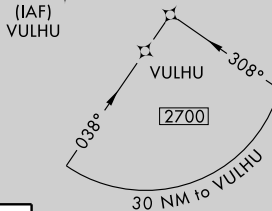
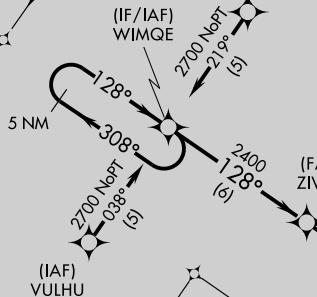
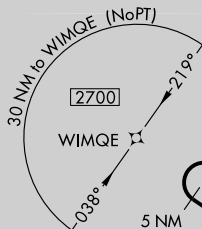
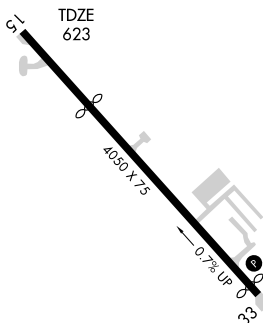
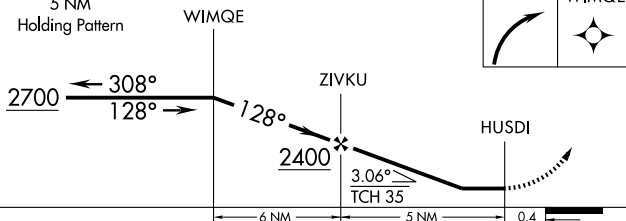
COMM/NAV/WEATHER REMARKS: AWOS-3 wind unreliable.



APP CRS
128°Rwy Idg **2956**
TDZE **623**
Apt Elev **633****RNAV (GPS) RWY 15**
FRANKFORT DOW MEMORIAL FIELD (F'KS)

If local altimeter setting not received, use Manistee altimeter setting and increase all MDA's 60 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2700 direct WIMQE and hold.

AWOS-3
118.325MINNEAPOLIS CENTER
132.9 338.3GCO
121.725UNICOM
123.05 (CTAF) 0ELEV **633**MIRL Rwy 15-33 **0**
REIL Rwy 33 **0**5 NM
Holding Pattern

CATEGORY	A	B	C	D
LNNAV MDA	1220-1	597 (600-1)	1220-1½ 597 (600-1½)	NA
CIRCLING	1320-1	687 (700-1)	1520-2¾ 887 (900-2¾)	NA

VOR/DME MBL 111.4 Chan 51	APP CRS 011°	Rwy Idg TDZE Apt Elev 633	N/A N/A 633
---	------------------------	---	--

VOR/DME-A

FRANKFORT DOW MEMORIAL FIELD (FKS)

▼ If local altimeter setting not received, use Manistee altimeter setting and increase all MDA's 60 feet.

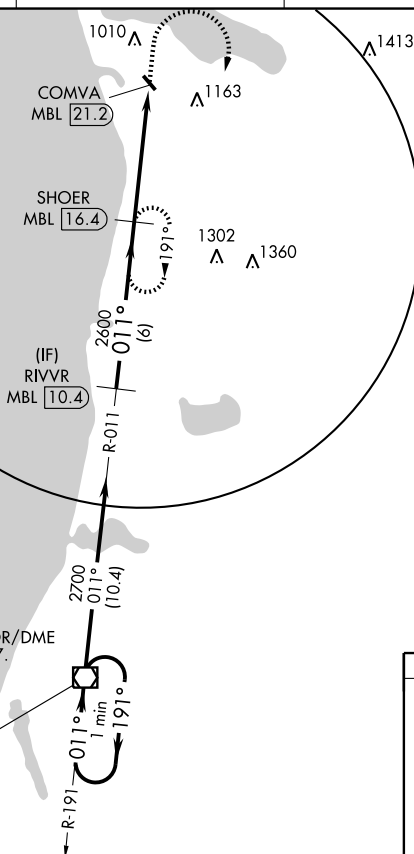
MISSED APPROACH: Climb to 2000, then climbing right turn to 2600 via MBL R-011 to SHOER/MBL 16.4 DME and hold.

AWOS-3
118.325

MINNEAPOLIS CENTER
132.9 338.3

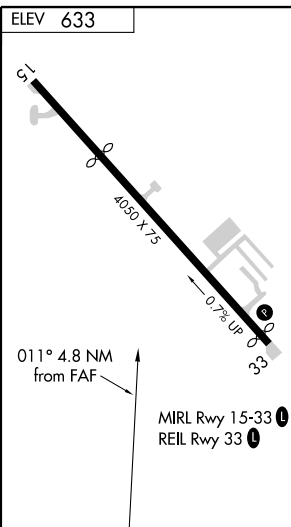
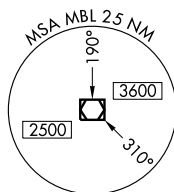
GCO
121.725

UNICOM
123.05 (CTAF) **0**



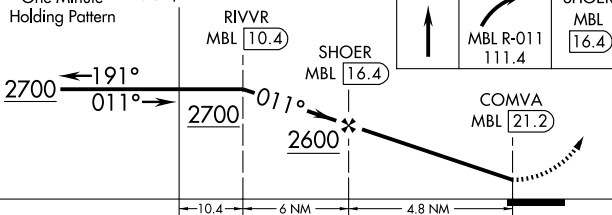
NoPT for arrival on MBL VOR/DME
airway radials 156 CW 177.

IAF
MANISTEE
111.4 MBL
Chan 51



One Minute
Holding Pattern

VOR/DME



CATEGORY	A	B	C	D
CIRCLING	1480-1 847 (900-1)	1480-1¼ 847 (900-1¼)	1520-2¾ 887 (900-2¾)	NA

FRANKFORT, MICHIGAN

Amdt 1 09295

44°38'N - 86°12'W

FRANKFORT DOW MEMORIAL FIELD (FKS)

VOR/DME-A

FREMONT MUNI (FFX) 3 SW UTC-5(-4DT) N43°26.36' W85°59.69'

772 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 18-36: H6498X100 (ASPH) S-30 MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 25'. P-line.

RWY 36: REIL. VASI(V2L)—GA 3.0° TCH 45'. Tree.

RWY 09-27: H3502X75 (ASPH) S-16 MIRL

RWY 27: PAPI(P4L)—GA 3.7° TCH 25'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. For svc after hrs call

231-821-0494. Parachute Jumping. Skydiving activity summer months, weekends SR-SS, occasional weekdays noon-SS.

Seaplane activity on adjacent lake .5 mile NE of arpt. Rwy 18-36 pavement cracking and loose stones on pavement. +8' crops adjacent to rwys during growing season. PAPI Rwy 18 OTS indef.

ACTIVATE MIRL Rwy 09-27 and Rwy 18-36, REIL Rwy 18 and Rwy 36, VASI Rwy 36 and PAPI Rwy 18 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.775 (231) 928-0715.

COMMUNICATIONS: CTAF/UNICOM 123.0

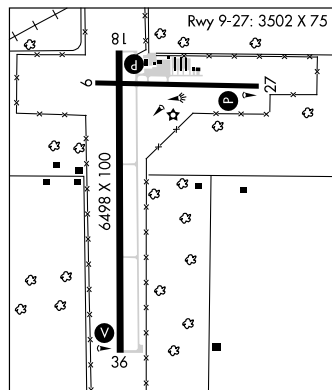
Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±) CLNC DEL 118.25

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 008° 16.3 NM to fld. 659/1W. HIWAS.



CHICAGO

H-2K, 10F, L-28I

IAP

FRUITPORT

FLYING-A-RANCH (39Z) 2 SE UTC-5(-4DT) N43°06.30' W86°07.42'

630 S4 TPA-1430(800) NOTAM FILE LAN

RWY 09-27: 1925X70 (TURF)

RWY 09: Thld dsplcd 327'. Trees.

RWY 27: Trees. Rgt tfc.

AIRPORT REMARKS: Attended irregularly. Arpt is CLOSED Nov-Mar. No snow removal. Fuel avbl for emerg use only. Rwy 09-27 and dsplcd thld marked with 3' yellow cones. Rwy 09-27 LIRL not for public use.

COMMUNICATIONS: CTAF 122.9

CHICAGO

GALEY N47°06.94' W88°24.07' NOTAM FILE CMX.

NDB (MHW/L0M) 275 CM 313° 4.8 NM to Houghton Co Mem. Unmonitored.

GREEN BAY

L-14J

GARLAND (See LEWISTON)

GAVAGAN FLD (See YALE)

GAYLORD N45°00.75' W84°42.26' NOTAM FILE LAN.

(L) VORW/DME 109.2 GLR Chan 29 at Gaylord Rgnl. 1318/4W.

VOR portion unusable 182°-195°. DME unusable byd 30 NM blo 3500'.

RCQ 122.55 (LANSING RADIO)

LAKE HURON

L-31C

WAAS Chan 82405 W18A	APP CRS 184°	Rwy Idg TDZE 770 Apt Elev 772	6498
--	------------------------	---	-------------

RNAV (GPS) RWY 18

FREMONT MUNI (FFX)

When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 65 feet, and all visibilities $\frac{1}{4}$ mile, increase all MDA 80 feet, and Cat C/D visibilities $\frac{1}{4}$ mile. VDP NA when using Muskegon altimeter setting. Baro-VNAV NA when using Muskegon altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

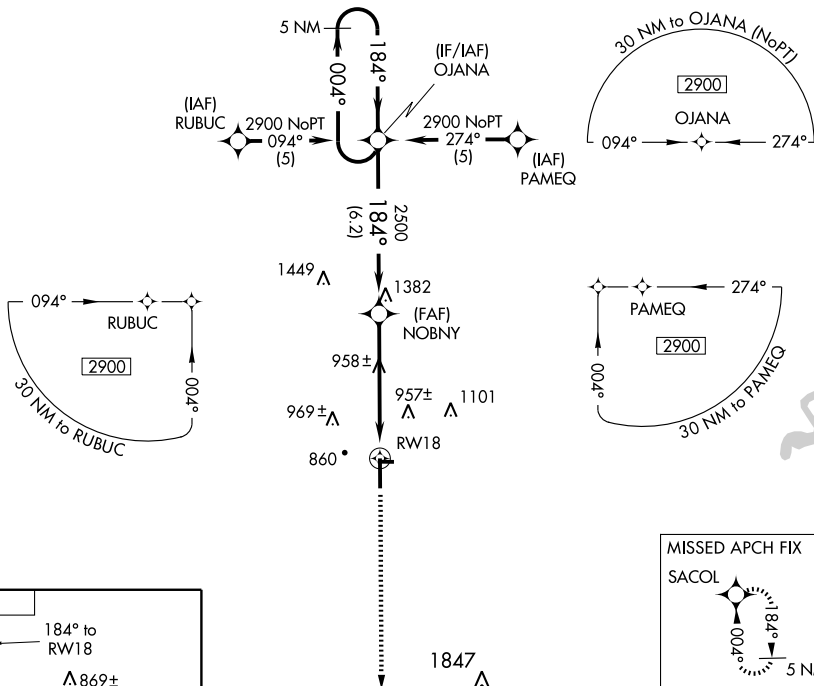
MISSED APPROACH:
Climb to 2900 direct
SACOL and hold.

AWOS-3
118.775

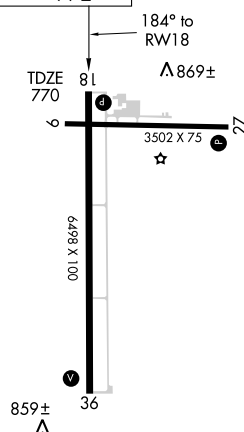
MUSKEGON APP CON ★
119.8 339.1

CLNC DEL
118.25

UNICOM
123.0 (CTAF) 0



ELEV 772



REIL Rwy 18 and 36
MIRL Rwy 9-27 and 18-36

2900		SACOL		VGSI and RNAV glidepath not coincident.		OJANA		5 NM Holding Pattern	
2900		SACOL		NOBNY		184°		2900	
RW18		*1.3 NM to RW18		*LNAV only		2500		GS 3.00° TCH 40	
1.3		3.9 NM		6.2 NM					
CATEGORY		A		B		C		D	
LPV DA		1075-1		305 (400-1)					
LNAV/VNAV DA		1169-1½		399 (400-1½)					
LNAV MDA		1220-1		450 (500-1)		1220-1¼ 450 (500-1¼)		1220-1½ 450 (500-1½)	
CIRCLING		1260-1		488 (500-1)		1260-1½ 488 (500-1½)		1340-2 568 (600-2)	

WAAS Chan 56505 W36A	APP CRS 004°	Rwy Idg TDZE Apt Elev	6498 760 772
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 36

FREMONT MUNI (FFX)

When local alimeter setting not received, use Muskegon alimeter setting and increase all DA 65 feet, and all visibilities ¼ mile, increase all MDA 80 feet, and Cat C/D visibilities ¼ mile. VDP NA when using Muskegon alimeter setting. Baro-VNAV NA when using Muskegon alimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH:
Climb to 2900 direct
OJANA and hold.

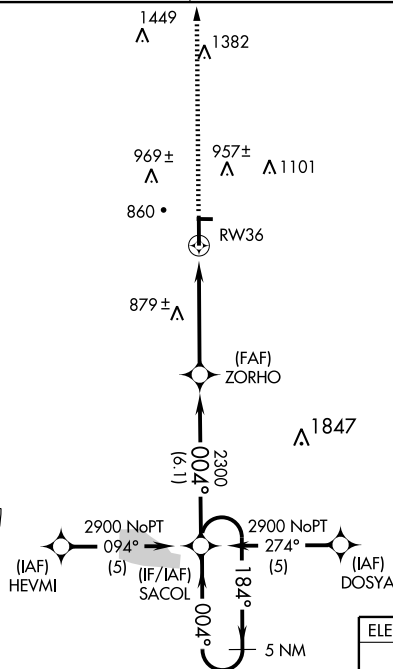
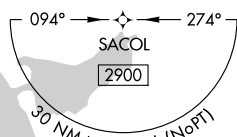
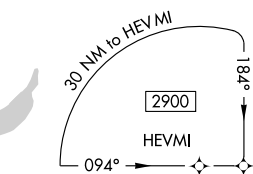
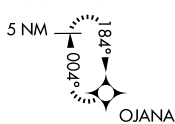
AWOS-3
118.775

MUSKEGON APP CON ★
119.8 339.1

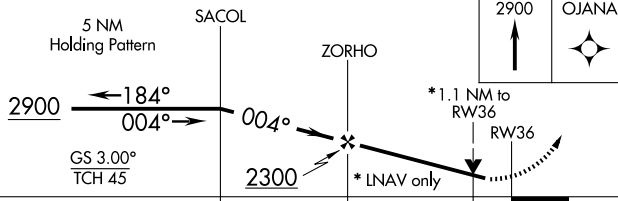
CLNC DEL
118.25

UNICOM
123.0 (CTAF) ①

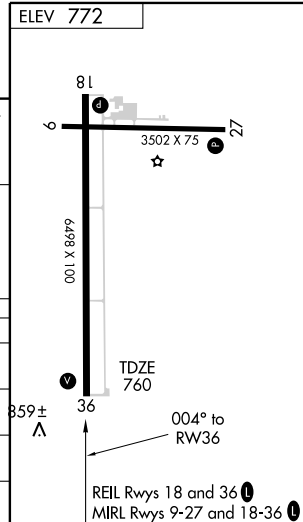
MISSED APCH FIX



ELEV 772



CATEGORY	A	B	C	D
LPV DA	1036-1 276 (300-1)			
LNAV/VNAV DA	1129-1¼ 369 (400-1¼)			
LNAV MDA	1140-1 380 (400-1)			1140-1¼ 380 (400-1¼)
CIRCLING	1260-1 488 (500-1)	1260-1½ 488 (500-1½)	1340-2 568 (600-2)	



VORTAC MKG
115.2
 Chan **99**

APP CRS
187°

Rwy Idg **6498**
 TDZE **770**
 Apt Elev **772**

VOR RWY 18
 FREMONT MUNI (FFX)

▼
 ▲
 Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon altimeter setting and increase all MDA 80 feet and increase S-18 Cat D visibility ¼ mile.

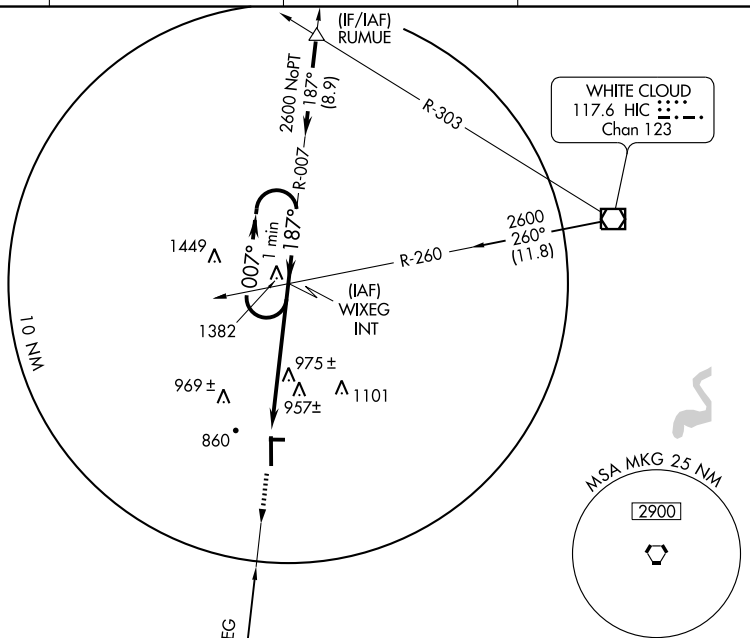
MISSED APPROACH: Climb to 2400 direct MKG VORTAC and hold.

AWOS-3
118.775

MUSKEGON APP CON*
119.8 339.1

CLNC DEL
118.25

UNICOM
123.0 (CTAF) **0**



MISSED APCH FIX

MUSKEGON
 MKG
 115.2
 Chan 99
 R-188

MUSKEGON
 115.2 MKG
 Chan 99

2400 MKG

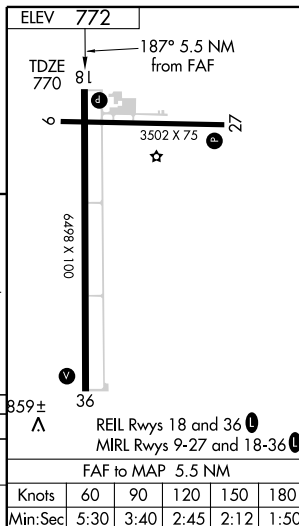
 115.2

WIXEG One Minute Holding Pattern

007° → 2600
 ← 187°

VGSI and descent angles not coincident.

CATEGORY	A	B	C	D
S-18	1280-1 510 (600-1)		1280-1½ 510 (600-1½)	
CIRCLING	1280-1 508 (600-1)		1280-1½ 508 (600-1½)	1340-2 568 (600-2)



VORTAC MKG	APP CRS	Rwy Idg	6498
115.2	008°	TDZE	760
Chan 99		Apt Elev	772

VOR RWY 36

FREMONT MUNI (FFX)

V DME or RADAR required. Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon altimeter setting and increase all S-36 MDA 80 feet, and Circling Cats A/B/C MDA 80 feet; increase S-36 Cat D visibility ¼ mile.
A VDP NA when using Muskegon altimeter setting.

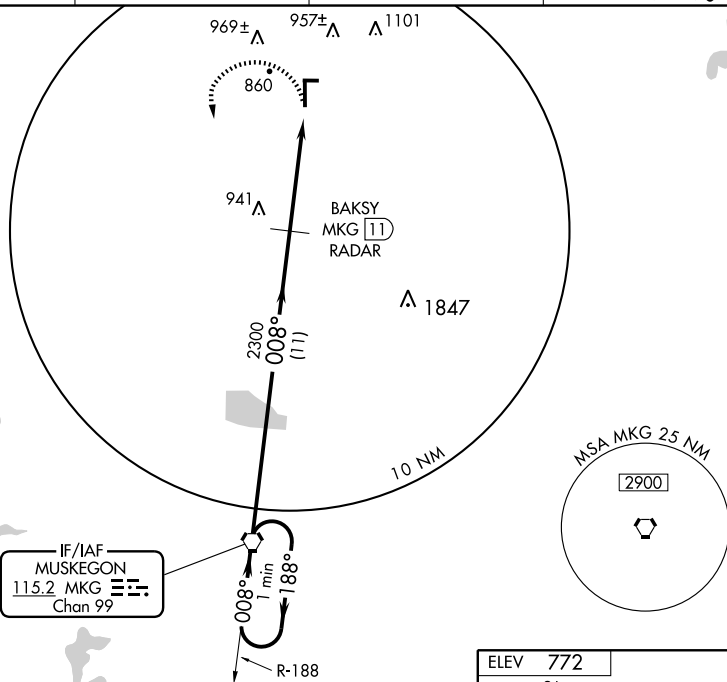
MISSED APPROACH: Climbing left turn to 2400 via MKG VORTAC R-355 to MKG VORTAC and hold.

AWOS-3
118.775

MUSKEGON APP CON ★
119.8 339.1

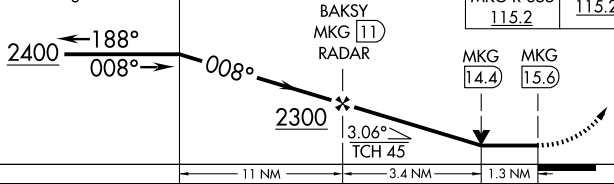
CLNC DEL
118.25

UNICOM
123.0 (CTAF) 0

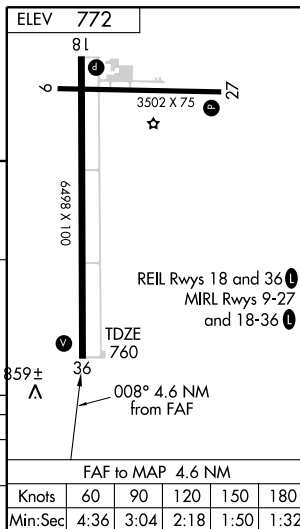


NoPT for arrivals on MKG VORTAC airway radials 076 CW 296.

One Minute Holding Pattern



CATEGORY	A	B	C	D
S-36	1200-1 440 (500-1)		1200-1¼ 440 (500-1¼)	1200-1½ 440 (500-1½)
CIRCLING	1260-1 488 (500-1)		1260-1½ 488 (500-1½)	1340-2 568 (600-2)



GAYLORD RGNL (GLR) 1 SW UTC-5(-4DT) N45°00.82' W84°42.22'

LAKE HURON

1328 B S4 FUEL 100LL, JET A NOTAM FILE GLR

H-2K, L-31C

RWY 09-27: H6578X150 (ASPH) D-100, 2S-127 HIRL

IAP

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 18-36: H3319X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P4R)—GA 3.0° TCH 40'. Road.

RWY 36: PAPI(P4R)—GA 3.0° TCH 40'. Road.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z, Sat-Sun 1300-0100Z. For attendant after hours call 989-732-4218 during attended hours. After hours call 989-370-9484 (manager cell). Unattended Thanksgiving, Christmas and New Years Day. Deer and birds on and in/ov arpt. Rwy 18-36 extensive cracking in pavement. Landing fee for turbines, jets and twins. Landing fee waived with minimum fuel purchase. Overnight parking fee. Military training activity in/ov arpt associated with Restricted Area R4201A/B. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36; REIL Rwy 27 and MALSR Rwy 09—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (989) 732-1571.

COMMUNICATIONS: CTAF/UNICOM 122.8

GAYLORD RCO 122.55 (LANSING RADIO)

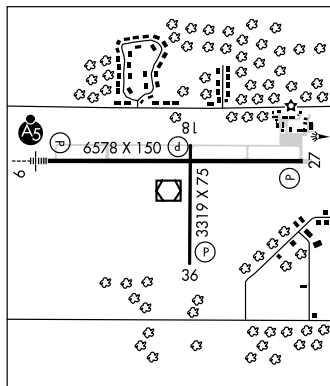
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' at fld. 1318/4W.

BANGU NDB (LOM) 375 GL N45°00.88' W84°48.48' 097° 4.4 NM to fld.

ILS 111.1 I-GLR Rwy 09. Class IE. LOM BANGU NDB Unmonitored.



LAKES OF THE NORTH (4Y4) 11 SW UTC-5(-4DT) N44°54.75' W84°52.59'

LAKE HURON

1286 B NOTAM FILE LAN

L-31B

RWY 05-23: H4285X40 (ASPH) LIRL

RWY 05: Thld dsplcd 400'. Road.

RWY 23: Thld dsplcd 450'. Road.

AIRPORT REMARKS: Attended 1400-2200Z, Sat 1400-1800Z. Deer on and in/ov arpt. Rwy 05-23 sfc rough and uneven, extensive cracks in pavement. Rwy slopes upward from E to W. West end approximately 20' higher than E end. Acft parking in primary sfc, N side, E end. ACTIVATE arpt beacon and LIRL Rwy 05-23—CTAF.

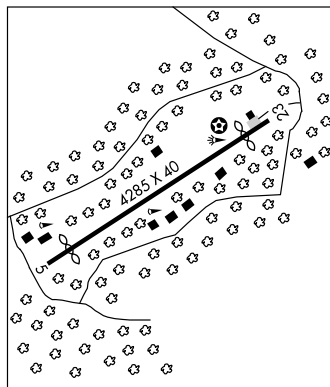
COMMUNICATIONS: CTAF 122.9

GAYLORD RCO 122.55 (LANSING RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75'

W84°42.26' 237° 9.5 NM to fld. 1318/4W.



GENESEE

DUFORD FLD (68G) 1 NW UTC-5(-4DT) N43°07.50' W83°37.58'

DETROIT

773 NOTAM FILE LAN

RWY 18-36: 3068X100 (TURF)

RWY 18: Thld dsplcd 200'. Trees.

RWY 36: Thld dsplcd 1020'. Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 18-36 sfc rough with irregular mowing. Rwy 18-36 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

GERALD R FORD INTL (See GRAND RAPIDS)

GIPPER N41°46.12' W86°19.11'. NOTAM FILE LAN.

CHICAGO

(H) VORTACW 115.4 GIJ Chan 101 179° 3.6 NM to South Bend Rgnl.

H-5E, 10F, L-26I

804/OE. HIWAS.

VOR portion unusable 199°-219° blo 17,500' and between 25 and 36 NM.

LOC I-GLR 111.1	APP CRS 096°	Rwy Idg TDZE Apt Elev	6578 1321 1328
---------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 9

GAYLORD RGNL (GLR)



Visibility reduction by helicopters NA.
Inoperative table does not apply to S-ILS 9 and
S-LOC 9 Cats A/B.

MALSR

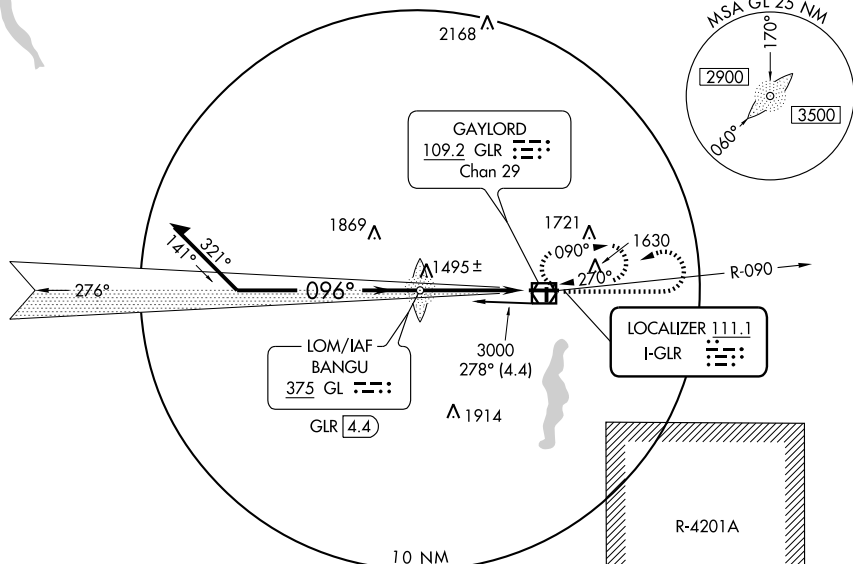


MISSED APPROACH: Climb to 3000 then left turn direct
GLR VOR/DME and hold.

ASOS
118.375

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) 0



ADF or DME REQUIRED

2470 MSL

Remain
within 10 NM

BANGU LOM
GLR 4.4

3000

GLR
109.2

3000

276°

096°

GS 3.00°
TCH 40

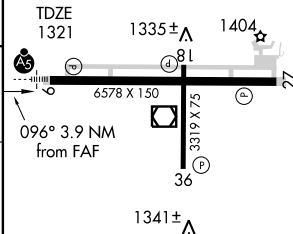
2700

VGSI and ILS glidepath not coincident.

GLR
0.5

3.9 NM

ELEV 1328



REIL Rwy 27 0
MIRL Rwy 18-36 0
HIRL Rwy 9-27 0

FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

LOM GL 375	APP CRS 096°	Rwy ldg TDZE Apt Elev	6578 1319 1328
----------------------	------------------------	-----------------------------	---

NDB RWY 9
GAYLORD RGNL (GLR)

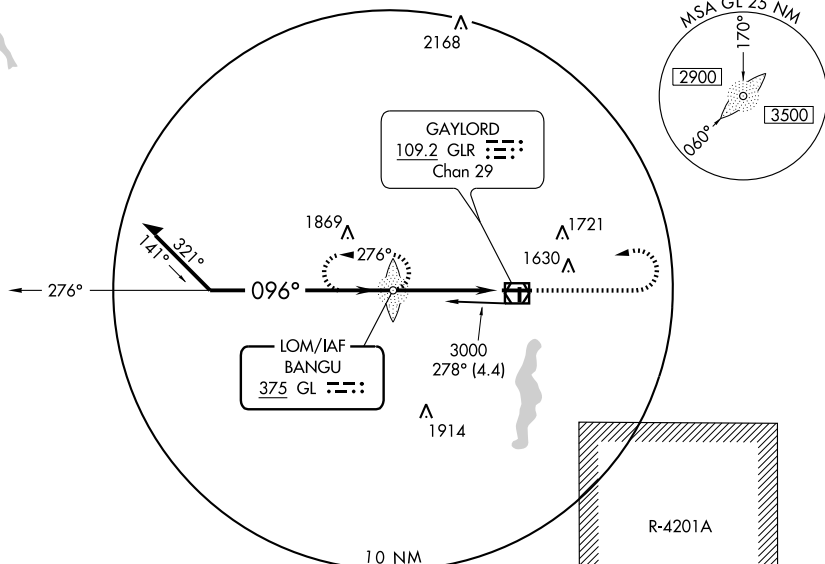


MISSED APPROACH: Climb to 3000,
then left turn direct GL LOM and hold.

ASOS
118.375

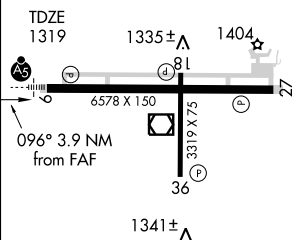
MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) 0



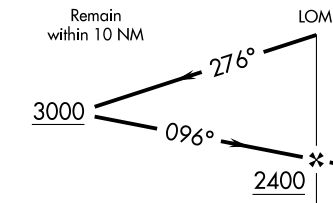
R-4201A

ELEV 1328



REIL Rwy 27 0
MIRL Rwy 18-36 0
HIRL Rwy 9-27 0

FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18



CATEGORY	A	B	C	D
S-9	1780-3/4 461 (500-3/4)			1780-1 1/4 461 (500-1 1/4)
CIRCLING	1840-1 512 (600-1)	1940-1 612 (700-1)	1940-1 3/4 612 (700-1 3/4)	2080-2 1/2 752 (800-2 1/2)

VOR/DME GLR
109.2
Chan **29**

APP CRS
104°

Rwy Idg **6578**
TDZE **1319**
Apt Elev **1328**

VOR or GPS RWY 9
GAYLORD RGNL (GLR)



MALSR

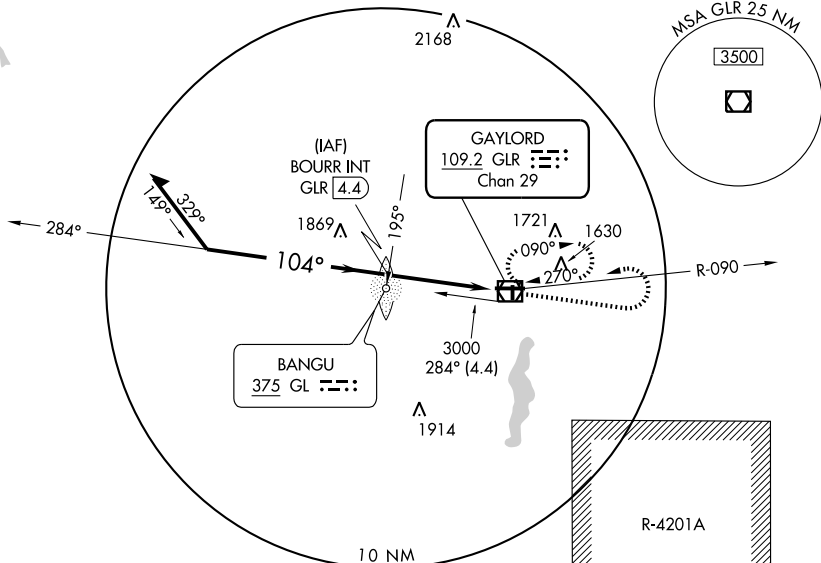


MISSED APPROACH: Climb to 3000, then
left turn direct GLR VOR/DME and hold.

ASOS
118.375

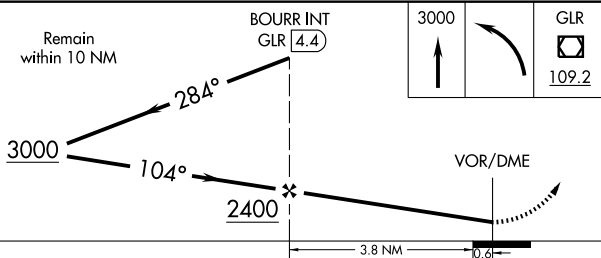
MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) 0



ADF or DME REQUIRED

△ 2470

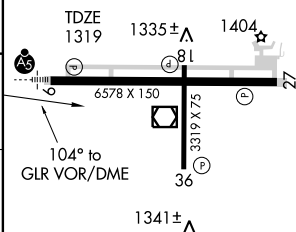


BOURR INT
GLR 4.4

3000

GLR
109.2

ELEV 1328



REIL Rwy 27 0
MIRL Rwy 18-36 0
HIRL Rwy 9-27 0

VOR/DME GLR
109.2
Chan **29**

APP CRS
270°

Rwy Idg	6578
TDZE	1328
Apt Elev	1328

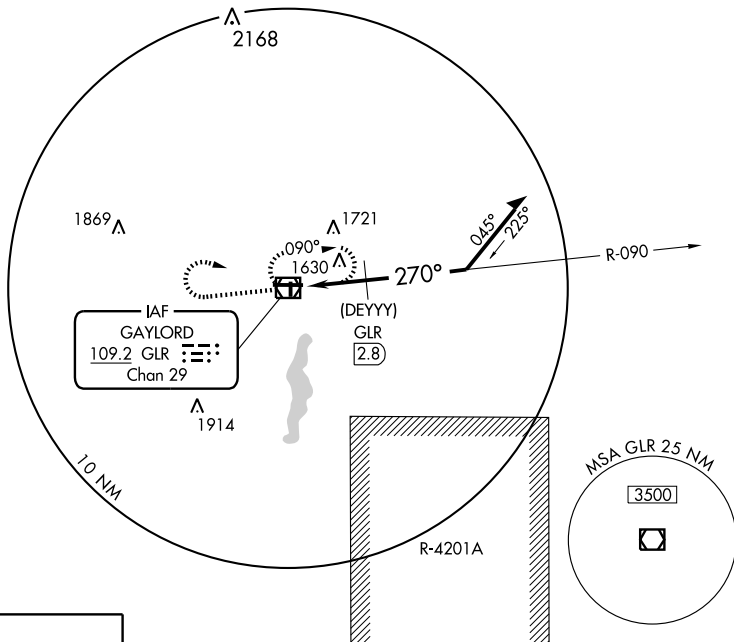
VOR or GPS RWY 27
GAYLORD RGNL (GLR)



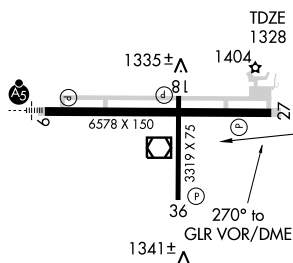
MISSED APPROACH: Climb to 3000, then right turn direct GLR VOR/DME and hold.

ASOS
118.375

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) **L**

ELEV 1328



3000

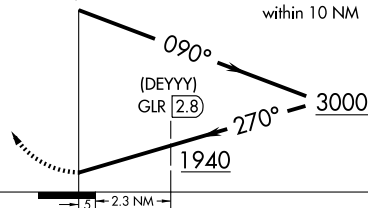


GLP

100.3

VOR/DME

Remain
within 10 NM



CATEGORY	A	B	C	D
S-27	1940-1	612 (700-1)	1940-1½ 612 (700-1¾)	1940-2 612 (700-2)
CIRCLING	1940-1	612 (700-1)	1940-1½ 612 (700-1¾)	2080-2½ 752 (800-2½)
DME MINIMUMS				
S-27	1880-1	552 (600-1)	1880-1½ 552 (600-1½)	1880-1¾ 552 (600-1¾)
CIRCLING	1880-1 552 (600-1)	1940-1 612 (700-1)	1940-1½ 612 (700-1¾)	2080-2½ 752 (800-2½)

REIL Rwy 27 **L**
MIRL Rwy 18-36 **L**
HIRL Rwy 9-27 **L**

GAYLORD, MICHIGAN
Amdt 1A 10154

45°01'N - 84°42'W

GAYLORD RGNL (GLR)
VOR or GPS RWY 27

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

GLADWIN ZETTEL MEML (GDW) 1 SE UTC-5(-4DT) N43°58.24' W84°28.50'

776 B FUEL 100LL, JET A TPA-1776(1000) NOTAM FILE LAN

RWY 09-27: H4700X75 (ASPH) S-44, D-60, 2D-90 MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0°. Trees.

RWY 27: REIL. PAPI(P2L). Trees.

RWY 15-33: 2500X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

AIRPORT REMARKS: Attended 1400-2200Z±. Except Christmas; New Years; Thanksgiving and Easter; for attendant and after hrs call 989-578-2174. Rwy 15-33 CLOSED when snow covered except ski-equipped acft. Rwy 15-33 marked with 3' yellow cones. Deer activity on and in/ov arpt. Radio Control acft ops near W side of Rwy 15-33. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z±)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

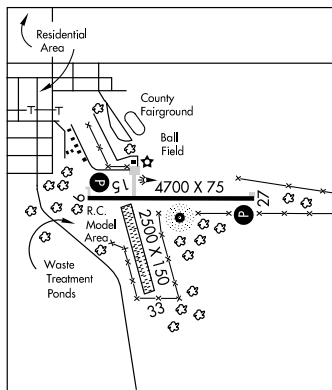
RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 330° 31.5 NM to fld. 663/3W. HIWAS.

WIGGINS NDB (MHW) 209 GDW N43°58.20' W84°28.50' at fld.

NOTAM FILE LAN.



GLOWACKI (See ST JOHNS)

GOGEBIC-IRON CO (See IRONWOOD)

GRADOLPH FLD (See PETERSBURG)

GRAND HAVEN MEML AIRPARK (3GM) 2 SE UTC-5(-4DT) N43°02.04' W86°11.89'

604 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3752X75 (ASPH) S-8 MIRL 0.3% up W

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 54'. Trees.

RWY 18-36: H2058X60 (ASPH) S-8 MIRL

RWY 18: Road. RWY 36: Tree.

AIRPORT REMARKS: Attended 1300Z±-dusk. Radio control acft flying area NW side of Rwy 18. ACTIVATE MIRL Rwy 09-27 and 18-36; REIL and PAPI Rwy 09 and 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±)

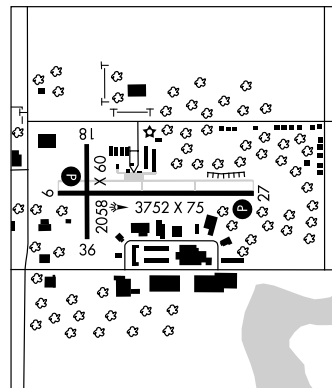
Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 222° 10.7 NM to fld. 659/1W.

HIWAS.



CHICAGO

L-281

IAF

NDB GDW 209	APP CRS 265°	Rwy ldg TDZE Apt Elev	4700 773 776
-----------------------	------------------------	-----------------------------	---

NDB or GPS RWY 27

GLADWIN ZETTEL MEMORIAL (GDW)



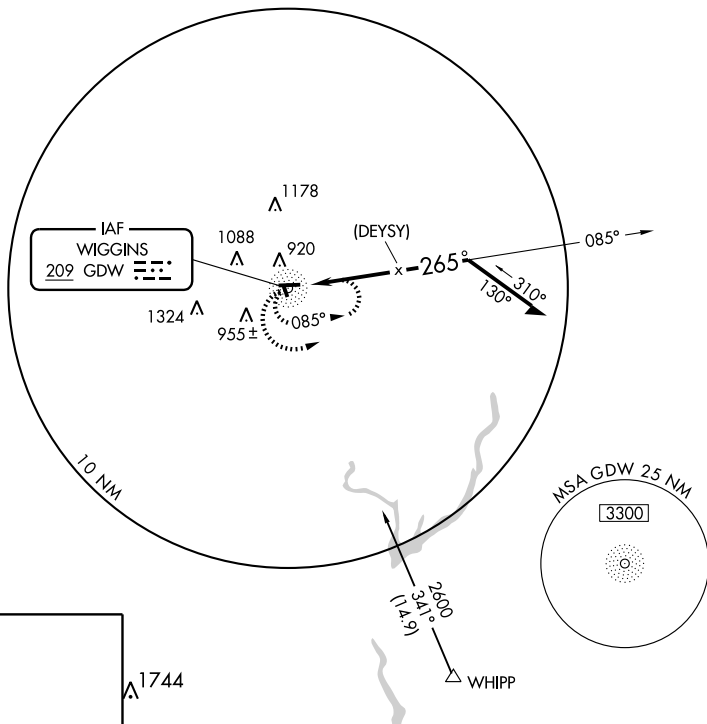
NA

Use Saginaw, MI altimeter setting.

MISSED APPROACH: Climbing left turn
to 2600 in GDW NDB holding pattern.

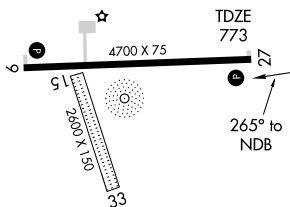
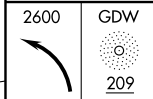
SAGINAW APP CON ★
126.45 236.625

UNICOM
122.8 (CTAF) 0



ELEV 776

1744



MIRL Rwy 9-27 0
REIL Rwy 9 and 27 0

Knots	60	90	120	150	180
Min:Sec					

GLADWIN, MICHIGAN

Amdt 3A 07074

GLADWIN ZETTEL MEMORIAL (GDW)

43°58'N - 84°28'W

NDB or GPS RWY 27

GLADWIN ZETTEL MEML (GDW) 1 SE UTC-5(-4DT) N43°58.24' W84°28.50'

776 B FUEL 100LL, JET A TPA-1776(1000) NOTAM FILE LAN

RWY 09-27: H4700X75 (ASPH) S-44, D-60, 2D-90 MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0°. Trees.

RWY 27: REIL. PAPI(P2L). Trees.

RWY 15-33: 2500X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

AIRPORT REMARKS: Attended 1400-2200Z±. Except Christmas; New Years; Thanksgiving and Easter; for attendant and after hrs call 989-578-2174. Rwy 15-33 CLOSED when snow covered except ski-equipped acft. Rwy 15-33 marked with 3' yellow cones. Deer activity on and in/ov arpt. Radio Control acft ops near W side of Rwy 15-33. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z±)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

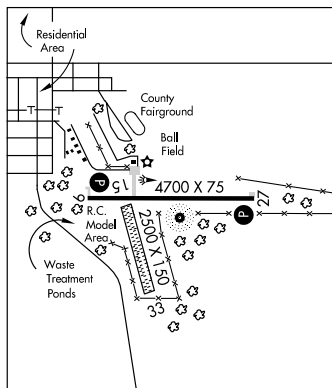
RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 330° 31.5 NM to fld. 663/3W. HIWAS.

WIGGINS NDB (MHW) 209 GDW N43°58.20' W84°28.50' at fld.

NOTAM FILE LAN.



GLOWACKI (See ST JOHNS)

GOGEBIC-IRON CO (See IRONWOOD)

GRADOLPH FLD (See PETERSBURG)

GRAND HAVEN MEML AIRPARK (3GM) 2 SE UTC-5(-4DT) N43°02.04' W86°11.89'

604 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3752X75 (ASPH) S-8 MIRL 0.3% up W

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 54'. Trees.

RWY 18-36: H2058X60 (ASPH) S-8 MIRL

RWY 18: Road. RWY 36: Tree.

AIRPORT REMARKS: Attended 1300Z±-dusk. Radio control acft flying area NW side of Rwy 18. ACTIVATE MIRL Rwy 09-27 and 18-36; REIL and PAPI Rwy 09 and 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±)

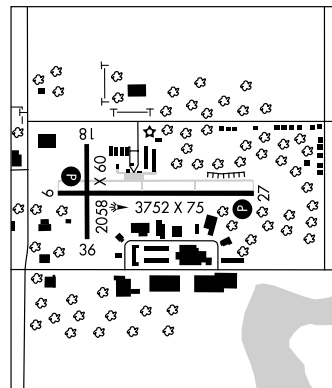
Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 222° 10.7 NM to fld. 659/1W.

HIWAS.



CHICAGO

L-281

IAP

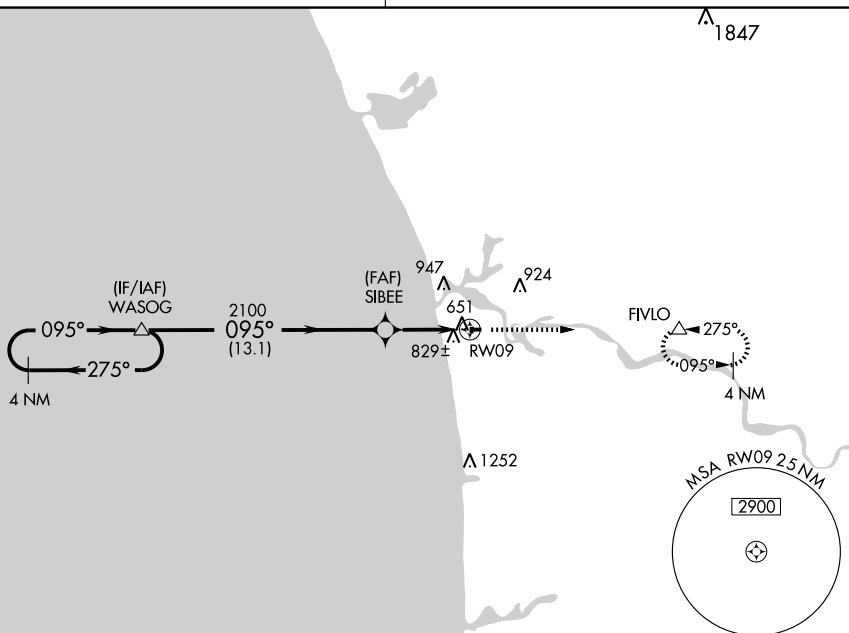
APP CRS
095°Rwy Idg **3752**
TDZE **602**
Apt Elev **604**

RNAV (GPS) RWY 9

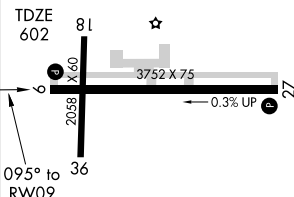
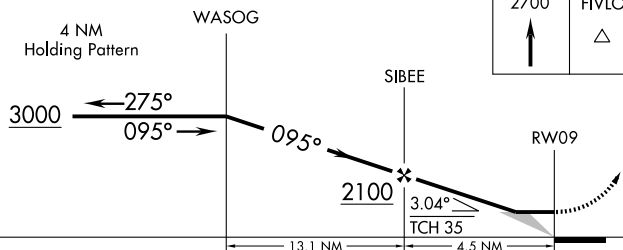
GRAND HAVEN MEMORIAL AIRPARK (3GM)

DME/DME RNP-0.3 NA.
Use Muskegon altimeter setting.
Circling NA at night to Rwy 18/36.

MISSED APPROACH: Climb to 2700 direct FIVLO and hold.

MUSKEGON APP CON ★
119.8 339.1UNICOM
122.7 (CTAF) 

ELEV 604



CATEGORY	A	B	C	D
RNAV MDA	1120-1 518 (600-1)	1120-1 518 (600-1)	1120-1 518 (600-1)	NA
CIRCLING	1160-1 556 (600-1)	1180-1 576 (600-1)	1180-1 576 (600-1)	NA

REIL Rwy 9 and 27
MIRL Rwy 9-27 and 18-36 GRAND HAVEN, MICHIGAN
Orig 09351

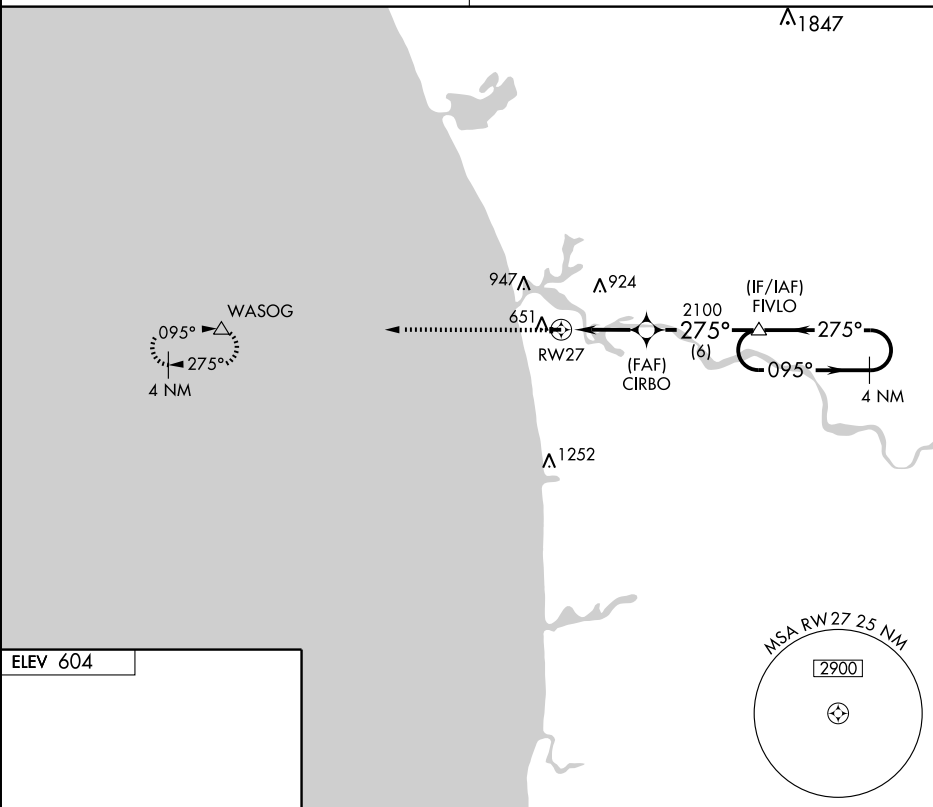
43°02'N - 86°12'W

GRAND HAVEN MEMORIAL AIRPARK (3GM)

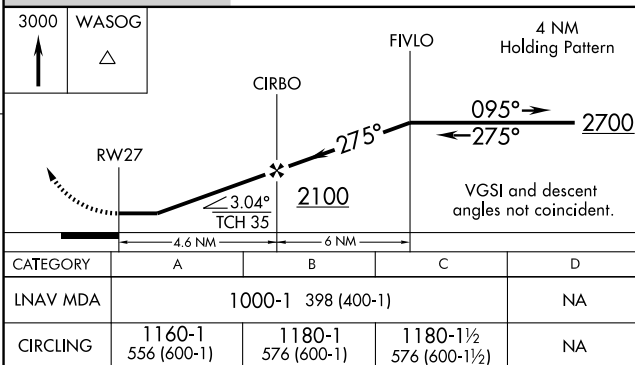
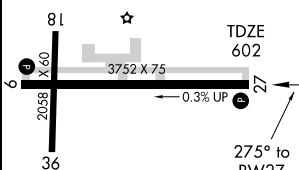
RNAV (GPS) RWY 9

APP CRS
275°Rwy Idg **3752**
TDZE **602**
Apt Elev **604****RNAV(GPS) RWY 27**

GRAND HAVEN MEMORIAL AIRPARK (3GM)

DME/DME RNP-0.3 NA.
Use Muskegon altimeter setting.
Circling NA at night rwys 18/36.MISSED APPROACH: Climb to 3000 direct WASOG
and hold.MUSKEGON APP CON ★
119.8 339.1UNICOM
122.7 (CTAF) 0

ELEV 604

REIL Rwys 9 and 27
MIRL Rwys 9-27 and 18-36GRAND HAVEN, MICHIGAN
Orig 09351GRAND HAVEN MEMORIAL AIRPARK (3GM)
RNAV(GPS) RWY 27

43°02'N - 86°12'W

VORTAC MKG 115.2 Chan 99	APP CRS 222°	Rwy ldg TDZE Apt Elev	N/A N/A 604
--	------------------------	-----------------------------	--

VOR-A

GRAND HAVEN MEMORIAL AIRPARK (3GM)



NA

Use Muskegon altimeter setting.
ADF, DME or RADAR REQUIREDMISSED APPROACH: Climb to 2500 then
left turn direct MKG VORTAC and hold.

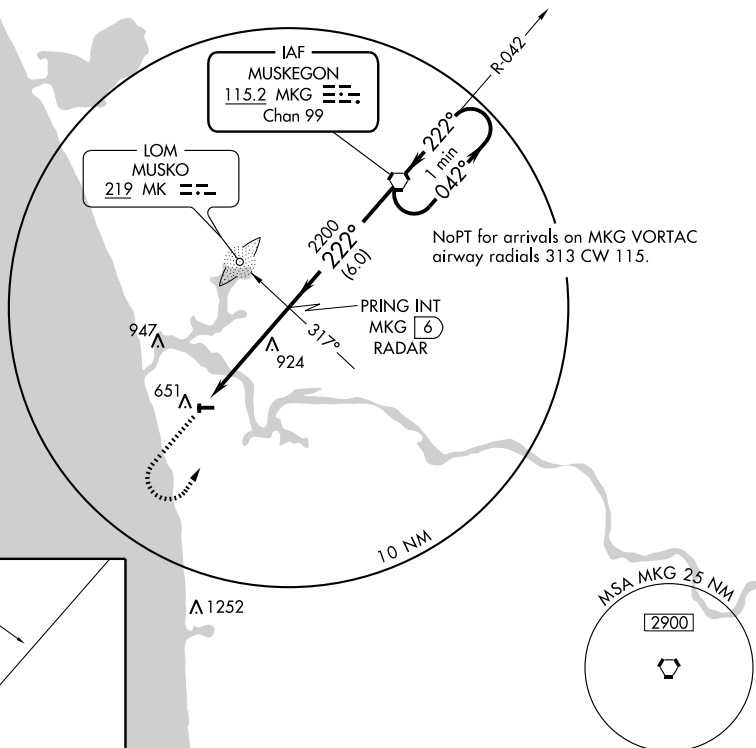
MUSKEGON APP CON ★

119.8 339.1

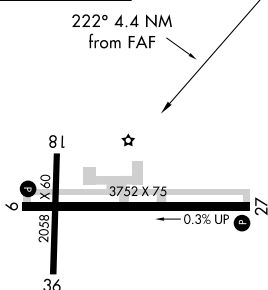
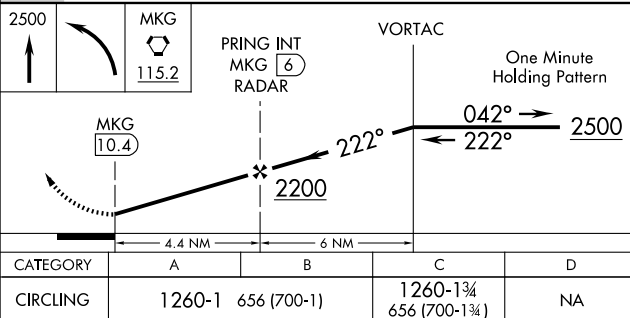
UNICOM

122.7 (CTAF) **0**

△ 1847



ELEV 604

REIL Rwy 9 and 27 **0**
MIRL Rwy 9-27 and 18-36 **0**

GRAND HAVEN, MICHIGAN

Amdt 16 09351

GRAND HAVEN MEMORIAL AIRPARK (3GM)

43°02'N - 86°12'W

VOR-A

GRAND LEDGE**ABRAMS MUNI**

(4D0) P (ARNG) 2 N UTC-5(-4DT) N42°46.45' W84°43.99'

DETROIT

842 B S4 FUEL 100LL TPA-See Remarks NOTAM FILE LAN

L-28J

RWY 09-27: H3200X75 (ASPH) MIRL 0.3% up E

IAP, DIAP

RWY 09: PAPI(P4L)—GA 3.0° TCH 25'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Tree.

RWY 18-36: 2580X120 (TURF)

RWY 18: Thld dsplcd 400'. Trees.

RWY 36: Thld dsplcd 397'. Road.

MILITARY SERVICE: FUEL 100LL, J4, PPR, ctc OPS DSN 623-0671/2/3,
C517-483-5671/2/3.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 CLOSED to fixed wing acft Nov-Apr, soft in spring. Intensive National Guard helicopter training on and in/ovf arpt. No fixed wing and limited rotary parking on national guard ramp. Rwy 18-36 and dsplcd thld marked with 3' yellow cones. Rwy 36 dsplcd thld marked with 3 yellow cones. Exit Rwy 18-36 only at twys. TPA-For helicopters 1700 (858) fixed wing TPA-1900(1058). ACTIVATE MIRL Rwy 09-27; REIL Rwy 27—CTAF.

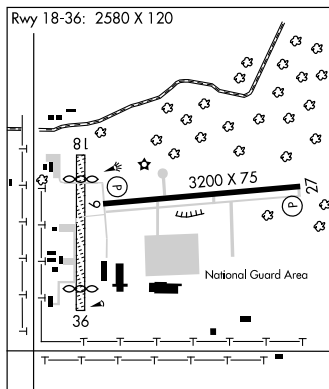
MILITARY REMARKS: CAUTION Avoid over flight of Grand Ledge blo 2000'.
Night training conducted using night vision devices.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ LANSING APP/DEP CON 118.65 226.4 ARNG OPS 41.85 122.7 241.0

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 340° 3.8 NM to fld. 887/5W.

**GRAND MARAIS**

(Y98) 3 SE UTC-5(-4DT) N46°37.25' W85°55.01'

GREEN BAY

838 NOTAM FILE GRB

RWY 14-32: 2800X100 (TURF)

RWY 14: Trees. RWY 32: Trees.

RWY 05-23: 2600X150 (TURF)

RWY 05: Trees. RWY 23: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Oct 15-May 15. Rwy not plowed winters. Rwy 05-23 marked with 3' yellow cones. Rwy 14-32 marked with 3' yellow cones. Rwy 05-23 and Rwy 14-32 surface rough.

COMMUNICATIONS: CTAF/UNICOM 122.7**GRAND RAPIDS**

N42°47.20' W85°29.82'. NOTAM FILE GRR.

CHICAGO

(H) VOR/DME 115.95 GRR Chan 106(Y) 353° 5.8 NM to Gerald R Ford Intl. 803/4W.

H-5E, 10F, L-28J

DME unmonitored.

DME unusable byd 30 NM blo 3000'.

RCO 122.25 (LANSING RADIO)

LAN VORTAC 110.8 Chan 45	APCH CRS 345°	Rwy Idg TDZE Arpt Elev	NA NA 842
--	-------------------------	------------------------------	--------------------------------------

AL-6349 [USA]

GRAND LEDGE/ ABRAMS MUNI

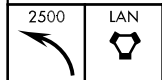
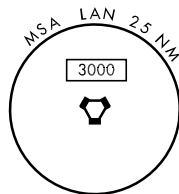
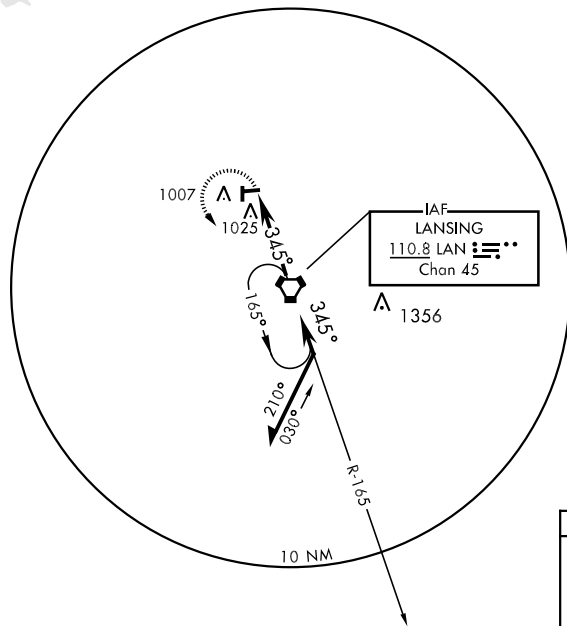
(4D0)

▲ NA Use Lansing altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 direct LAN VORTAC and hold.

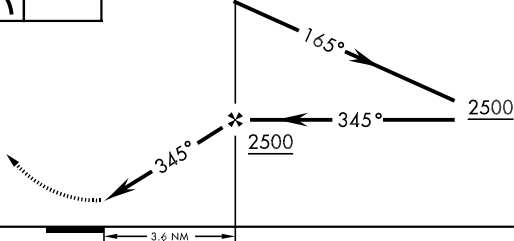
LANSING APP CON
118.65 226.4

UNICOM (NG OPS)
122.7 0

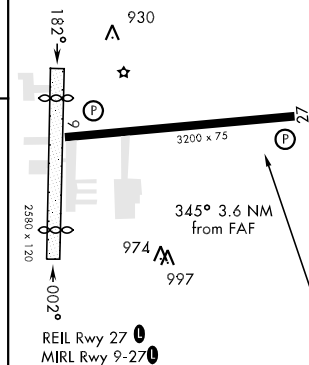


VORTAC

Remain within 5 NM



ELEV **842** Rwy 002° Idg 2183'
Rwy 182° Idg 2180'



FAF to MAP 3.6 NM

Knots	45	60	75	90	105
Min:Sec	4:48	3:36	2:51	2:24	2:03

CATEGORY

COPTER

H-345° 1360-1/2 518 (600-1/2)

GRAND LEDGE, MICHIGAN

42° 47' N-84° 44' W

GRAND LEDGE/ ABRAMS MUNI

(4D0)

Amdt 6 08185

COPTER VOR 345°

VORTAC LAN 110.8 Chan 45	APP CRS 345°	Rwy ldg TDZE Apt Elev	N/A N/A 842
--	------------------------	-----------------------------	--

VOR or GPS-A

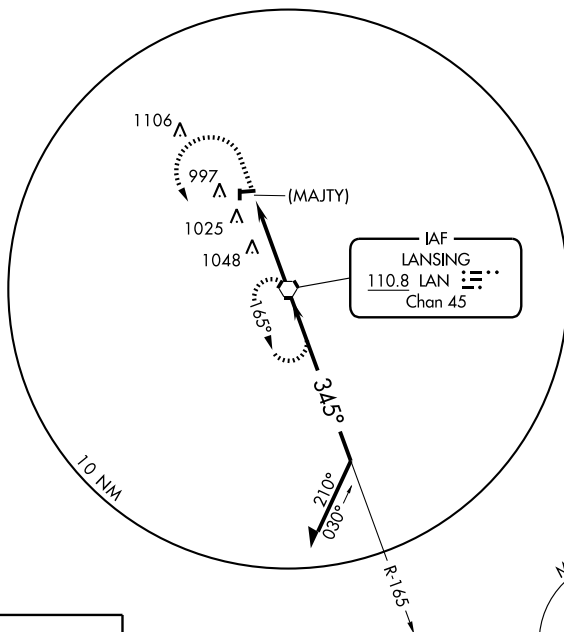
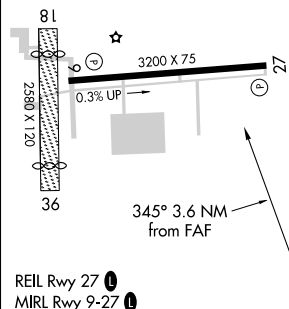
GRAND LEDGE / ABRAMS MUNI (4DØ)



NA

Use Lansing altimeter setting.

MISSED APPROACH: Climb to 2500, then turn left direct LAN VORTAC and hold.

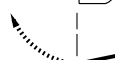
LANSING APP CON
118.65 226.4UNICOM
122.7 (CTAF) 0ELEV **842**REIL Rwy 27
MIRL Rwy 9-27

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

GRAND LEDGE, MICHIGAN

Amdt 5 09295

2500	LAN 110.8
------	--------------

(MAJTY)
LAN 3.6

VORTAC

Remain
within 10 NM165°
345°
3000

2500

CATEGORY	A	B	C	D
CIRCLING	1400-1	558 (600-1)	1400-1½ 558 (600-1½)	NA

42°46'N - 84°44'W

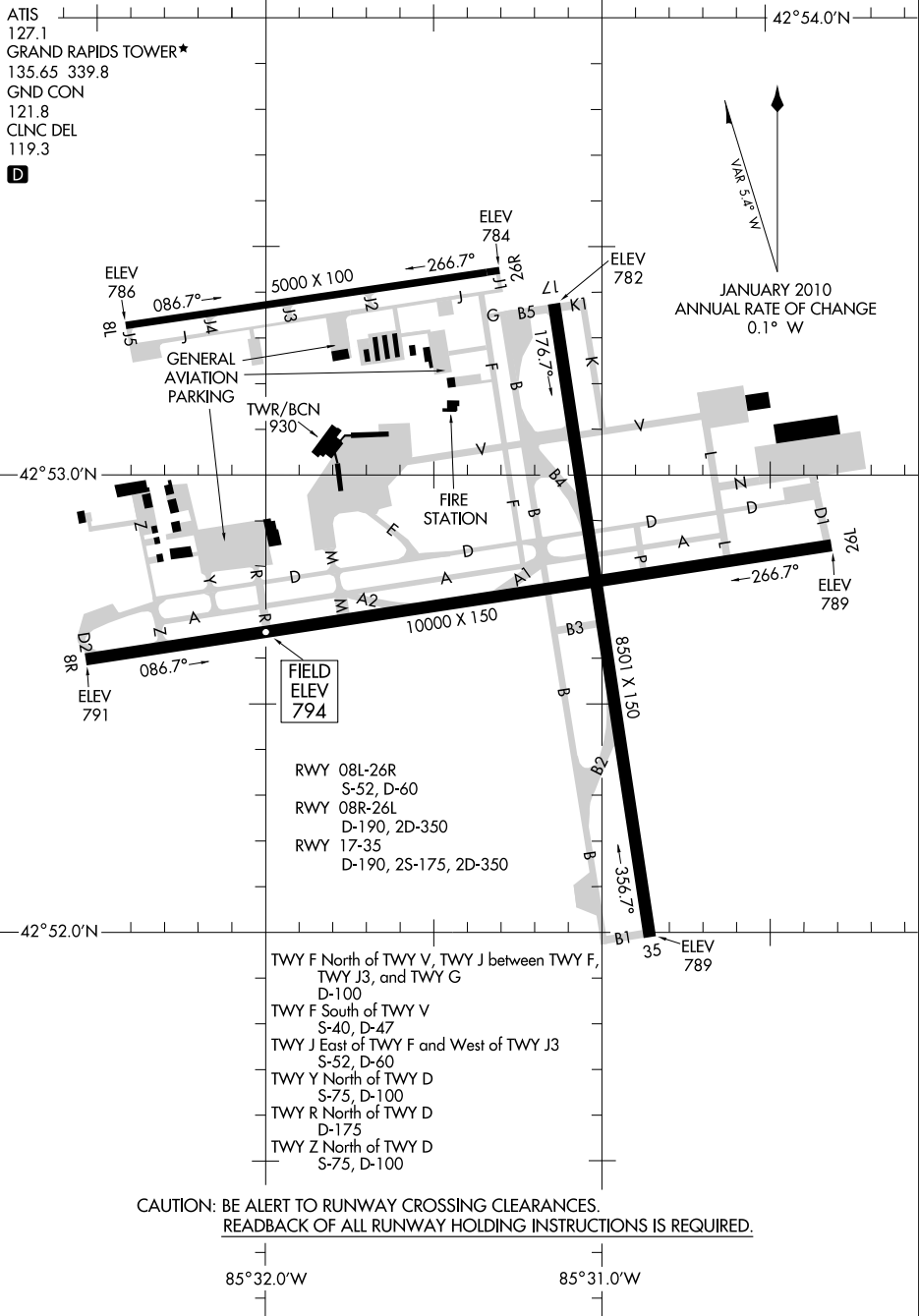
GRAND LEDGE / ABRAMS MUNI (4DØ)

VOR or GPS-A

AIRPORT DIAGRAM

AL-5184 (FAA)

GRAND RAPIDS / GERALD R. FORD INTL (GRR)
GRAND RAPIDS, MICHIGAN



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

GRAND RAPIDS, MICHIGAN
GRAND RAPIDS / GERALD R. FORD INTL (GRR)

GRAND RAPIDS

GERALD R FORD INTL (GRR) 6 SE UTC-5(-4DT) N42°52.85' W85°31.37'

CHICAGO

794 B S4 FUEL 100LL, JET A OX 1, 3 LRA Class I, ARFF Index C NOTAM FILE GRR H-5E, 10F, L-281 IAP, AD

RWY 08R-26L: H10000X150 (CONC-GRVD) D-190, 2D-350 HIRL

RWY 08R: MALSR.

RWY 26L: MALSR. PAPI(P4L)—GA 3.0' TCH 73'.

RWY 17-35: H8501X150 (CONC-GRVD) D-190, 2S-175, 2D-350 HIRL

RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 38'.

RWY 35: MALSR. PAPI(P4R)—GA 3.0' TCH 74'.

RWY 08L-26R: H5000X100 (CONC-GRVD) S-52, D-60 MIRL

RWY 08L: REIL. VASI(V4L)—GA 3.0° TCH 33'.

RWY 26R: REIL. VASI(V4L)—GA 3.0° TCH 33'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 08L: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 08R: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 17: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

RWY 26L: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 26R: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 35: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

AIRPORT REMARKS: Attended continuously. PPR for acft with 171'

wingspan or larger. Birds on and in/ovf arpt. Noise abatement procedures: Rwy 08R depart on rwy heading until reaching the

highway E of arpt; Rwy 26L on apch to arpt turn final at highway E of arpt. Rwy 08L-26R for apch Cat C acft, wingspan must be less than 79'. Apch Cat D and E acft prohibited. Pushback advisories on the terminal ramp are not provided by ATC. When twr closed ACTIVATE HIRL Rwy 08R-26L; Rwy 17-35; MIRL Rwy 08L-26R; VASI Rwy 08L; Rwy 17 and Rwy 26R; PAPI Rwy 26L and Rwy 35; REIL Rwy 08L; Rwy 17 and Rwy 26R and MALSR Rwy 08R; 26L and 35—CTAF. Twy F north of Twy V, Twy J btm Twy F and Twy J3 and Twy G clsd to acft over 100000 lbs; Twy F, south of Twy V and remaining sections of Twy J clsd to acft over 47000 lbs; Twy Y 400' north of Twy D clsd to acft over 100,000 lbs; Twy R north of Twy D clsd to acft over 175000 lbs. Twy R north of Twy D, Twy Y north of Twy D, Twy Z north of Twy D and Twy N are non-movement areas. Rwy 08R and 26L touchdown and rollout runway visual range avbl. Rwy 35 touchdown runway visual range avbl. Snow removal personnel will monitor CTAF when twr is clsd. LRA: Mon-Fri 2 hours PPR for customs call 616-942-5245, pager 616-249-5380. Call prior to 2100Z± on preceding Friday for after hours service.

WEATHER DATA SOURCES: ASOS (616) 956-3224. WSP.

COMMUNICATIONS: CTAF 135.65 ATIS 127.1 616-336-4755 UNICOM 122.95

GRAND RAPIDS RCO 122.25 (LANSING RADIO)

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (North) 128.4 (South) (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.4 (0500-1030Z±)

GRAND RAPIDS TOWER 135.65 (1030-0500Z±) GND CON 121.8 CLNC DEL 119.3

AIRSPACE: CLASS C svc 1030-0500Z± ctc APP CON other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan 106(Y) N42°47.20' W85°29.82' 353° 5.8 NM to fld. 803/4W. DME unmonitored.

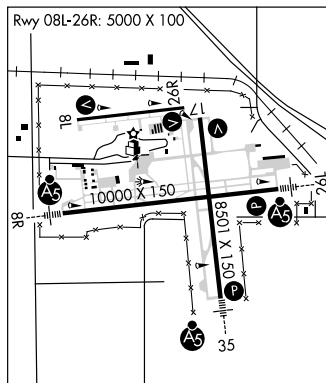
KNOBS NDB (LOM) 263 GR N42°53.74' W85°22.71' 266° 6.4 NM to fld.

ILS 109.7 I-GRR Rwy 26L. Class IB. LOM KNOBS NDB. Unmonitored when twr clsd.

ILS 108.3 I-CYZ Rwy 08R. Unmonitored when twr clsd.

ILS 111.9 I-DVS Rwy 35. ILS unmonitored when twr clsd.

ASR (1030-0500Z±)



GRANT (Ø1C) 2 NE UTC-5(-4DT) N43°20.50' W85°46.50'

CHICAGO

815 NOTAM FILE LAN

RWY 09-27: 2517X120 (TURF) LIRL

RWY 09: Thld dsplcd 387'. Trees.

RWY 27: Thld dsplcd 580'. Trees.

AIRPORT REMARKS: Arrived irregularly. 100LL fuel avbl for emergencies only. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Arpt lgts opr dusk-0500Z±. ACTIVATE LIRL Rwy 09-27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

LOC I-CYZ <u>108.3</u>	APP CRS 085°	Rwy Idg 10000 TDZE 794 Apt Elev 794
----------------------------------	------------------------	--

ILS or LOC RWY 8R

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

V *RVR 1800 authorized with the use of FD or AP or HUD to DA.
A When local altimeter setting not received, use Holland altimeter setting
 and increase all DA 76 feet and all MDA 80 feet, increase S-LOC 8R
 Cat C visibility to RVR 5000, and Cat D to RVR 6000. For inoperative
 MALS when using Holland altimeter setting, increase S-ILS 8R all
 Cats visibility to RVR 5000.

MALSR



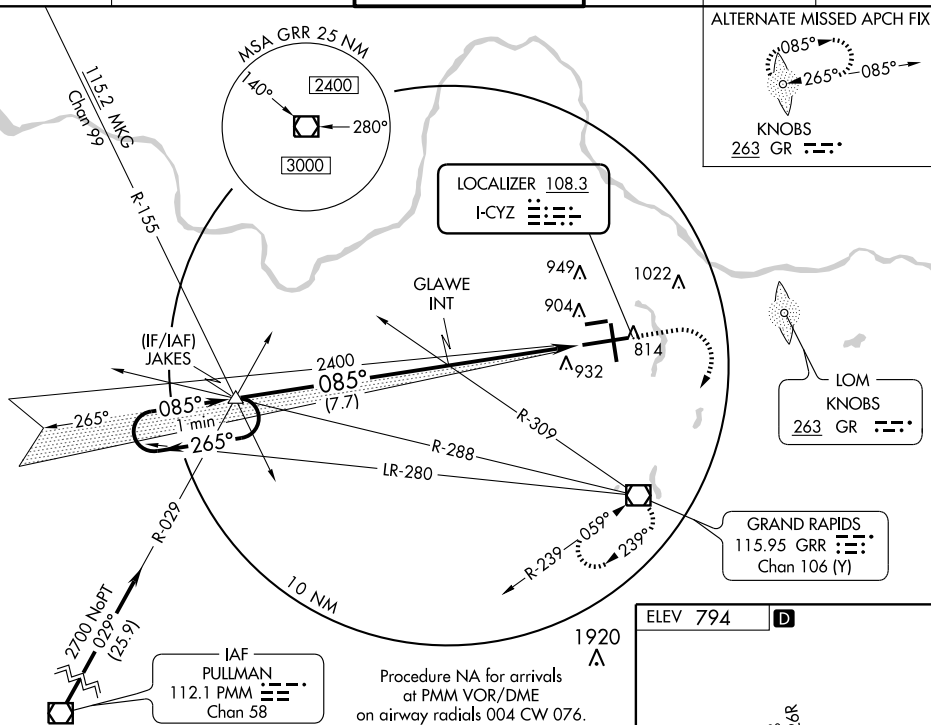
MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct GRR VOR/DME and hold.

ATIS
127.1

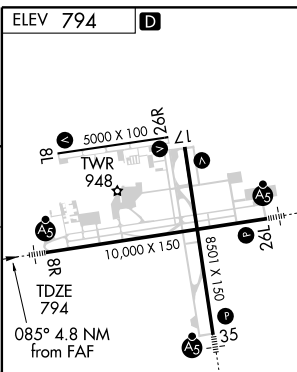
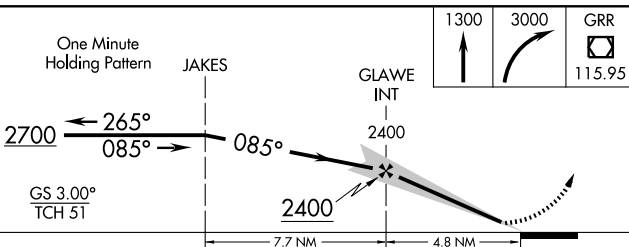
GRAND RAPIDS APP CON ★
128.4 257.6

GRAND RAPIDS TOWER ★
135.65 (CTAF) L 339.8

GND CON
121.8

CLNC DEL
119.3UNICOM
122.95

EC-1. 26 AUG 2010 to 23 SEP 2010



CATEGORY	A	B	C	D
S-ILS 8R	* 994/24		200 (200-½)	
S-LOC 8R	1240/24	446 (500-½)	1240/40 446 (500-¾)	1240/50 446 (500-1)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

MIRL Rwy 8L-26R **L**
REIL Rwy 8L, 26R and 17 **L**
HIRL Rwy 8R-26L and 17-35 **L**

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

GRAND RAPIDS, MICHIGAN

Amdt 6 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

ILS or LOC RWY 8R

LOC I-GRR 109.7	APP CRS 265°	Rwy Idg TDZE Apt Elev	10000 790 794
---------------------------	------------------------	-----------------------------	--

ILS or LOC RWY 26L

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

V When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, increase S-LOC 26L Cat C visibility to RVR 6000, Cat D to 1½ miles, Circling Cat C to 1¼ miles, GLGHR INT minimums S-LOC 26L Cat C to RVR 4000. For inoperative MALS R when using GLGHR INT minimums, increase S-LOC 26L Cat D visibility to RVR 5000. For inoperative MALS R when using Holland altimeter setting, increase S-ILS 26L all Cats visibility to RVR 5000.
****RVR 1800 authorized with the use of FD or AP or HUD to DA.**

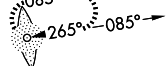
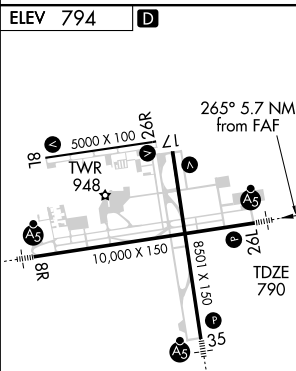
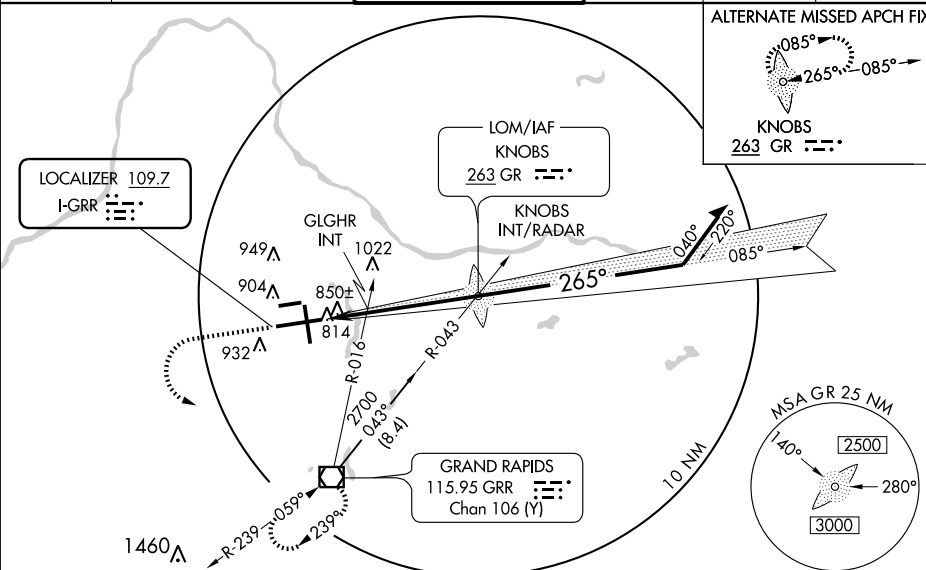
MALS R



MISSED APPROACH:
Climb to 1300 then
climbing left turn to
3000 direct
GRR VOR/DME
and hold.

ATIS 127.1	GRAND RAPIDS APP CON * 128.4 257.6	GRAND RAPIDS TOWER * 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------

ALTERNATE MISSED APCH FIX

KNOBS
263 GR

MIRL Rwy 8L-26R
 REIL Rws 8L, 26R and 17
 HIRL Rws 8R-26L and 17-35

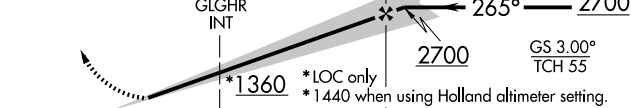
FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

GRAND RAPIDS, MICHIGAN

Amdt 21 10154

1300	3000	GRR
		115.95

VGSI and ILS glidepath
not coincident.



CATEGORY	A	B	C	D
S-ILS 26L	** 990/24 200 (200-½)			
S-LOC 26L	1360/24	570 (600-½)	1360/50 570 (600-1)	1360/60 570 (600-1¼)
CIRCLING	1360-1	566 (600-1)	1360-1½ 566 (600-1½)	1360-2 566 (600-2)
GLGHR INT MINIMUMS				
S-LOC 26L	1120/24 330 (400-½)			1120/40 330 (400-¾)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

ILS or LOC RWY 26L

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LOC I-DVS <u>111.9</u>	APP CRS 355°	Rwy Idg 8501 TDZE 790 Apt Elev 794
----------------------------------	------------------------	---

ILS or LOC RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

▼ When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase S-LOC 35 Cat B visibility to RVR 4000 and Cat C/D visibility $\frac{1}{4}$ mile. Increase Cat B/C/D Circling visibility $\frac{1}{4}$ mile.

▲ **ASR** LMBAW INT MINIMUMS: Increase S-LOC 35 Cat C visibility to RVR 4000 and Cat D to RVR 5000. For inoperative MALSR when using Holland altimeter setting, increase S-ILS 35 all Cats visibility to RVR 5000.

****** RVR 1800 authorized with the use of FD or AP or HUD to DA.

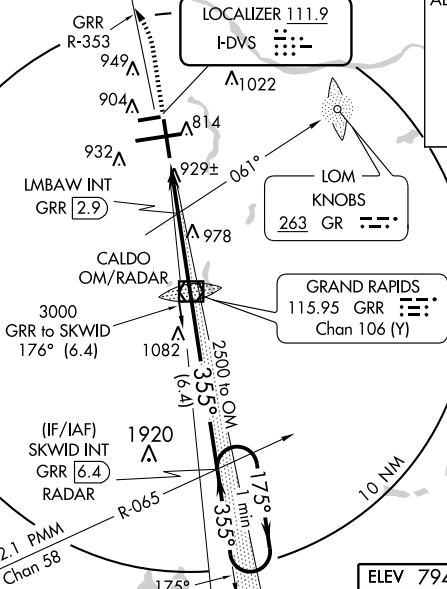
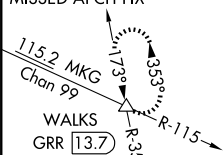
MALSR



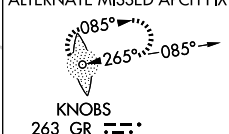
MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 via GRR VOR/DME R-353 to WALKS INT/GRR 13.7 DME and hold.

ATIS 127.1	GRAND RAPIDS APP CON ★ 128.4 257.6	GRAND RAPIDS TOWER ★ 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
---------------	---------------------------------------	---	------------------	-------------------	------------------

MISSED APCH FIX

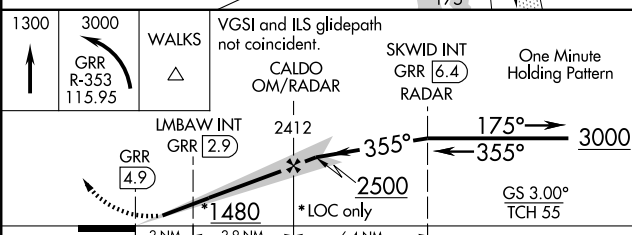
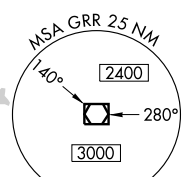


ALTERNATE MISSED APCH FIX



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

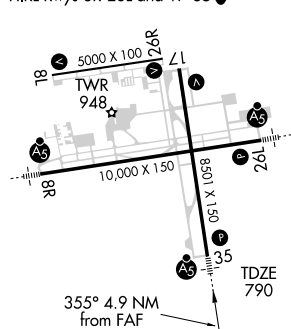


CATEGORY	A	B	C	D
S-ILS 35	** 990/24 200 (200-½)			
S-LOC 35	1480/24 690 (700-½)	1480-1½ 690 (700-1½)	1480-1¾ 690 (700-1¾)	1480-1¾ 690 (700-1¾)
CIRCLING	1480-1 686 (700-1)	1480-2 686 (700-2)	1480-2¼ 686 (700-2¼)	1480-2¼ 686 (700-2¼)
LMBAW FIX MINIMUMS				
S-LOC 35	1180/24 390 (400-½)			1180/40 390 (400-¾)
CIRCLING	1260-1 466 (500-1)	1260-1½ 466 (500-1½)	1360-2 566 (600-2)	1360-2 566 (600-2)

FIFV 794

D

MIRL Rwy 8L-26R **L**
REIL Rwys 8L, 26R and 17 **L**
HIRL Rwys 8R-26L and 17-35 **L**



EAE to MAR 18 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

ILS or LOC RWY 35

WAAS CH 40213 W08A	APP CRS 085°	Rwy Idg TDZE Apt Elev	5000 787 794
--	------------------------	-----------------------------	---

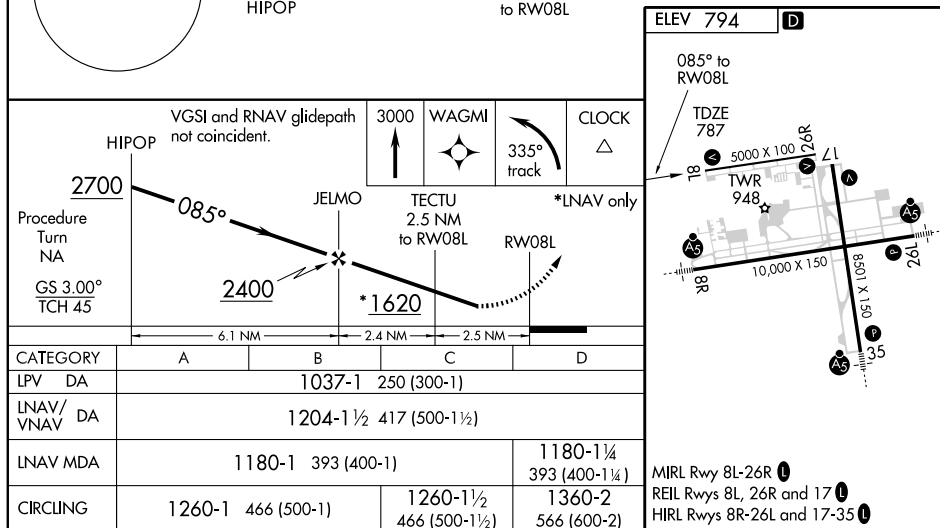
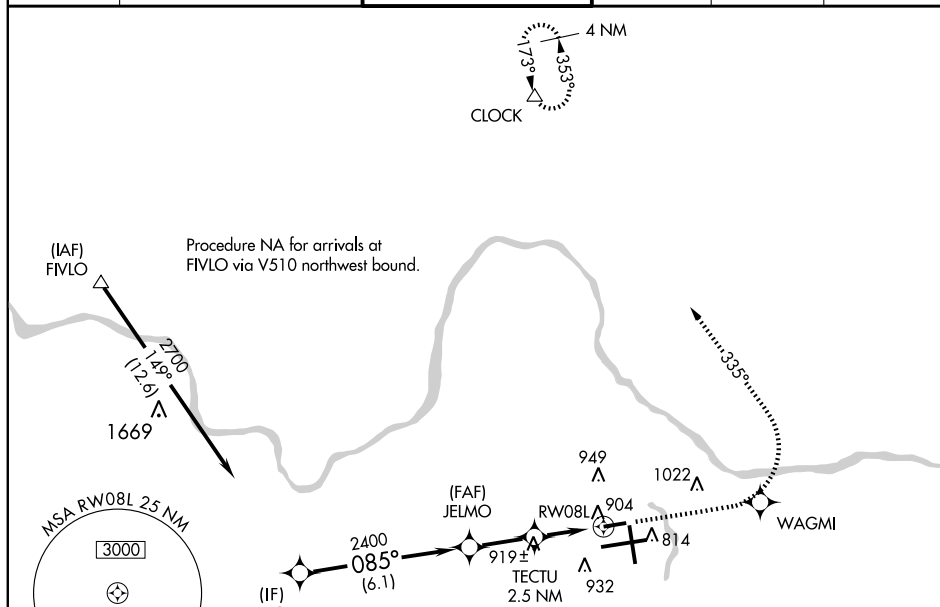
RNAV (GPS) RWY 8L

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

⚠ Baro-VNAV NA when using Holland altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.
⚠ Visibility reduction by helicopters NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct WAGMI and left turn via track 335° to CLOCK and hold.

ATIS 127.1	GRAND RAPIDS APP CON* 128.4 257.6	GRAND RAPIDS TOWER* 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	---	---	-------------------------	--------------------------	-------------------------



WAAS CH 40113 W08B	APP CRS 085°	Rwy Idg 10000 TDZE 794 Apt Elev 794
--	------------------------	--

RNAV (GPS) RWY 8R

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

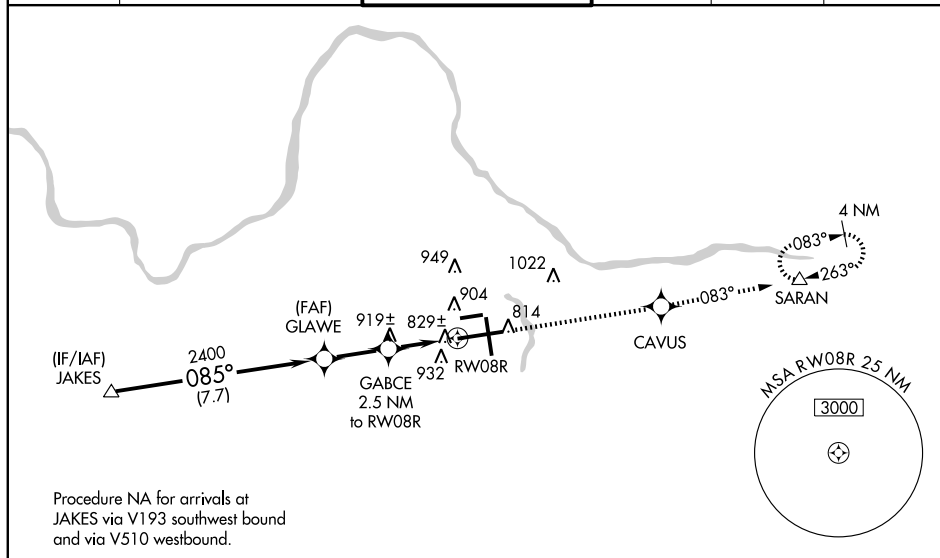
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Holland altimeter setting. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, LNAV/VNAV all Cats visibility to RVR 6000, LNAV Cat C to RVR 4000. For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For inoperative MALSR when using Holland altimeter setting, increase LPV all Cats visibility to RVR 5000.

MALSR



MISSED APPROACH: Climb to 2700 direct CAVUS and via track 083° to SARAN and hold.

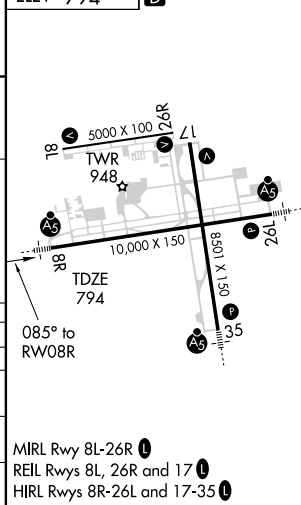
ATIS 127.1	GRAND RAPIDS APP CON * 128.4 257.6	GRAND RAPIDS TOWER * 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------



JAKES 2700 Procedure Turn NA GS 3.00° TCH 51		GLAWE 2400 *1640		CAVUS 2700 2.5 NM to RW08R *1.1 NM to RW08R	TRK 083°	SARAN
7.7 NM		2.3 NM		1.4 NM	1.1 NM	
CATEGORY	A	B	C	D		
LPV DA	994/24		200 (200-½)			
LNAV/VNAV DA	1213/50		419 (500-1)			
LNAV MDA	1180/24		386 (400-½)		1180/50 386 (400-1)	
CIRCLING	1260-1 466 (500-1)		1260-1½ 466 (500-1½)		1360-2 566 (600-2)	

ELEV 794

D



WAAS CH 93912 W17A	APP CRS 175°	Rwy Idg TDZE 789 Apt Elev 794
--	------------------------	---

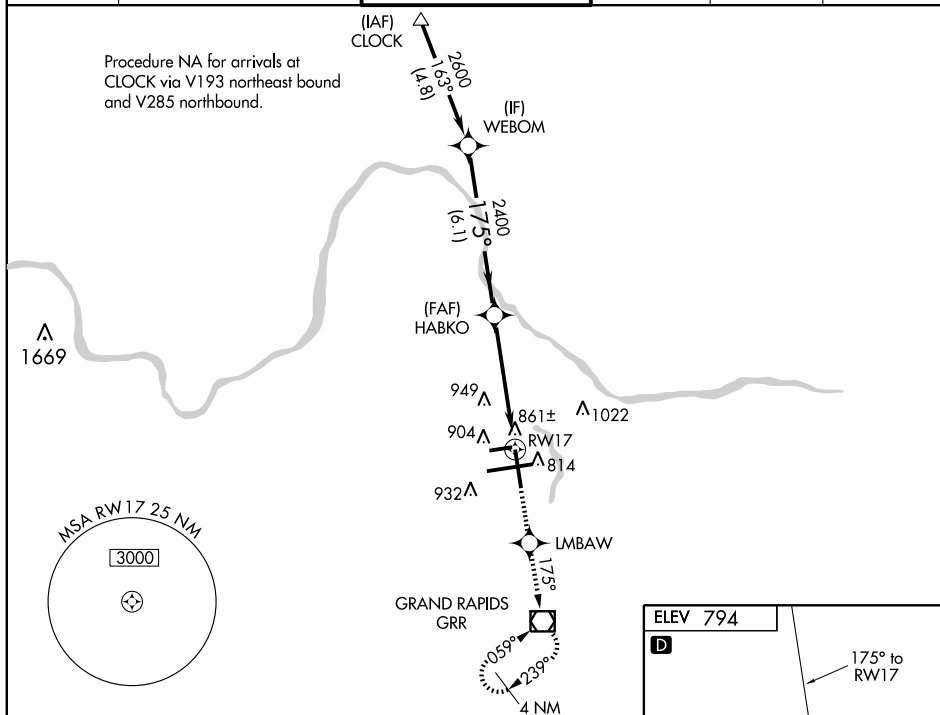
RNAV (GPS) RWY 17

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

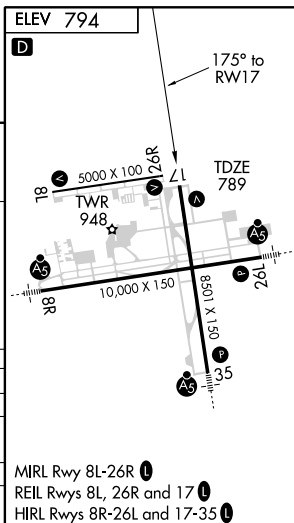
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by Helicopters NA. When local altimeter ASR setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV visibility ½ mile all Cats and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Holland altimeter setting.

MISSED APPROACH: Climb to 3000 direct LMBAW and via track 175° to GRR VOR/DME and hold, continue climb-in-hold to 3000.

ATIS 127.1	GRAND RAPIDS APP CON ★ 128.4 257.6	GRAND RAPIDS TOWER ★ 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------



	WEBOM	VGSi and RNAV glidepath not coincident.	3000	LMBAW	175° track	GRR
	2600					
Procedure Turn NA						
GS 3.00° TCH 50						
	2400					
	6.1 NM		3.7 NM	1.2		
CATEGORY	A	B	C	D		
LPV DA		1108-1	319 (400-1)			
LNAV/VNAV DA		1259-1¾	470 (500-1¾)			
LNAV MDA	1200-1	411 (500-1)	1200-1¼	411 (500-1¼)		
CIRCLING	1260-1	466 (500-1)	1260-1½	566 (600-2)		



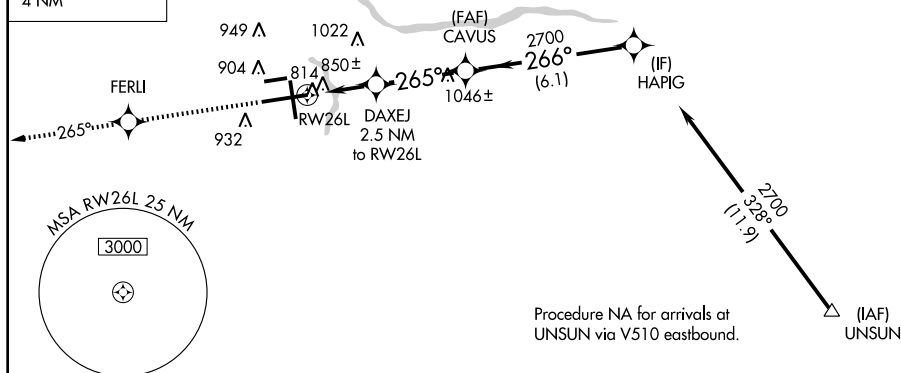
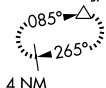
RNAV (GPS) RWY 26L
GRAND RAPIDS / GERALD R. FORD INTL (GRR)



MISSED APPROACH: Climb to 2700 direct FERLI and via 265° track to JAKES and hold.

GRAND RAPIDS TOWER★
135.65 (CTAF) **L** 339.8

JAKES

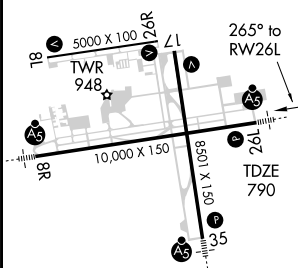


Procedure NA for arrivals at
UNSUB via V510 eastbound.

UNSUB

ELEV 794

D



MIRL Rwy 8L-26R **L**
REIL Rwys 8L, 26R and 17 **L**
HIRL Rwys 8R-26L and 17-35 **L**

2700 ↑	FERLI ✦	TRK 265°	JAKES △	VGSI and RNAV glidepath not coincident.			Procedure Turn NA
*LNAV only							
CATEGORY	A			B		C	D
LPV DA	990/24 200 (200-½)						
LNAV/ VNAV DA	1114/24 324 (400-½)						1114/40 324 (400-¾)
LNAV MDA	1280/24 490 (500-½)				1280/40 490 (500-¾)	1280/50 490 (500-1)	
CIRCLING	1280-1 486 (500-1)				1280-1½ 486 (500-1½)	1360-2 566 (600-2)	

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

Amdt 1 10154

42°53'N - 85°31'W

RNAV (GPS) RWY 26L

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

WAAS CH 82413 W26A	APP CRS 265°	Rwy Idg TDZE Apt Elev	5000 787 794
--	------------------------	-----------------------------	---

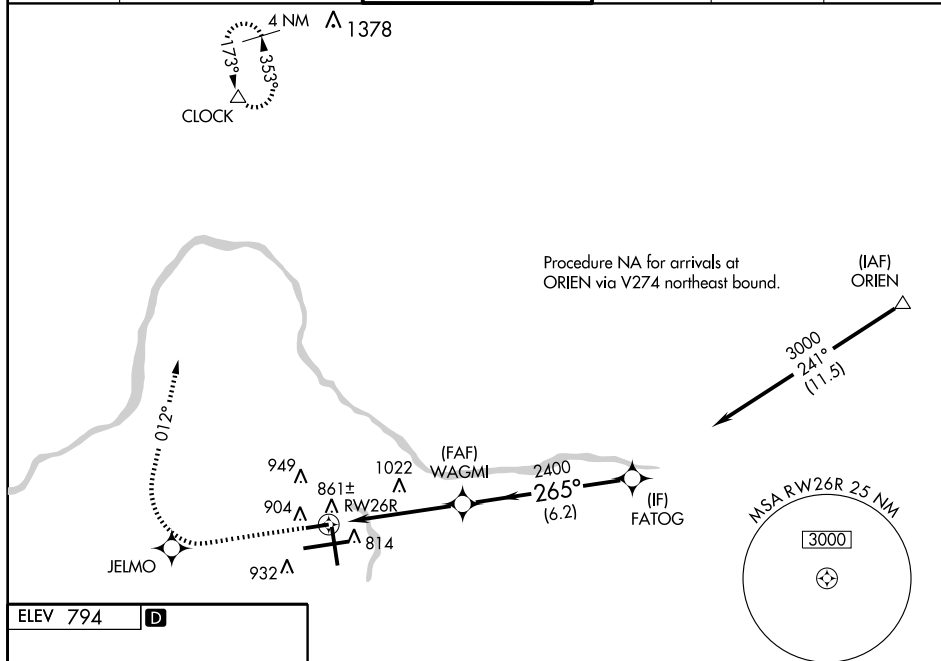
RNAV (GPS) RWY 26R

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

⚠ Baro-VNAV NA when using Holland altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.
⚠ ASR Visibility reduction by helicopters NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat C/D ¼ mile.

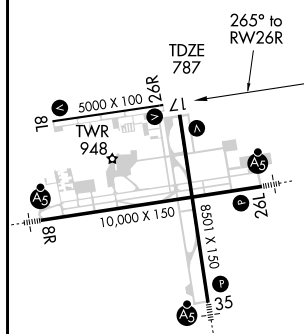
MISSED APPROACH: Climb to 3000 direct JELMO and right turn via track 012° to CLOCK and hold.

ATIS 127.1	GRAND RAPIDS APP CON * 128.4 257.6	GRAND RAPIDS TOWER * 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------



ELEV 794

D



MIRL Rwy 8L-26R

REIL Rws 8L, 26R and 17

HIRL Rws 8R-26L and 17-35

3000	JELMO	CLOCK	VGSI and RNAV glidepath not coincident.	FATOG	Procedure Turn NA
3000		012° track		3000	
				265°	
				2400	
				4.9 NM	6.2 NM
CATEGORY	A	B	C	D	
LPV DA		1037-1	250 (300-1)		
LNAV/VNAV DA		1216-1½	429 (500-1½)		
LNAV MDA	1280-1	493 (500-1)	1280-1¼ 493 (500-1¼)	1280-1½ 493 (500-1½)	
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)	

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

RNAV (GPS) RWY 26R

WAAS CH 87112 W35A	APP CRS 355°	Rwy Idg TDZE Apt Elev	8501 790 794
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

▽ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LNAV/VNAV visibility to RVR 6000 all Cats and LNAV Cat C visibility to RVR 4000. For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For inoperative MALSR when using Holland altimeter setting increase LPV all Cats visibility to RVR 5000. Baro-VNAV and VDP NA when using Holland altimeter setting.

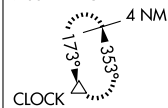
MALSR



MISSED APPROACH:
Climb to 3000 direct
HABKO and via track
350° to CLOCK and
hold.

ATIS 127.1	GRAND RAPIDS APP CON ★ 128.4 257.6	GRAND RAPIDS TOWER ★ 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------

MISSED APCH FIX



△ CLOCK

HABKO

949

904

932

929±

990

(FAF)

FALSU

2500

(6.1)

355

(IF)

SKWID

3000

(5.9)

1956

△

(IAF)

BOHRR

3000

HABKO

TRK

350°

CLOCK

△

VGS1 and RNAV glidepath not coincident.

SKWID

3000

Procedure

Turn

NA

GS 3.00°

TCH 55'

1 NM

3.1 NM

6.1 NM

CATEGORY

LPV DA

LNAV/VNAV DA

LNAV MDA

CIRCLING

990/24

200 (200-1/2)

1236/50

446 (500-1)

1180/50

390 (400-1)

1260-1

466 (500-1)

1260-1 1/2

466 (500-1 1/2)

1360-2

566 (600-2)

MSA RW35 25 NM

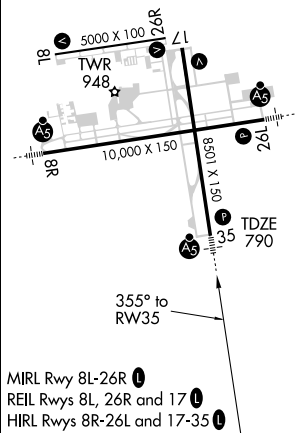
3000

△

Procedure NA for arrivals at
BOHRR via V285 southbound.

ELEV 794

D



GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

RNAV (GPS) RWY 35

VOR/DME GRR	APP CRS	Rwy Idg	8501
Chan 115.95	175°	TDZE	789
106 (Y)		Apt Elev	794

VOR RWY 17

GRAND RAPIDS / GERALD R. FORD INTL (GRR)



ASR

MISSED APPROACH: Climb to 3000 direct GRR VOR/DME and hold.

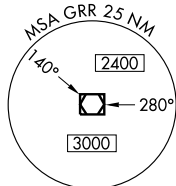
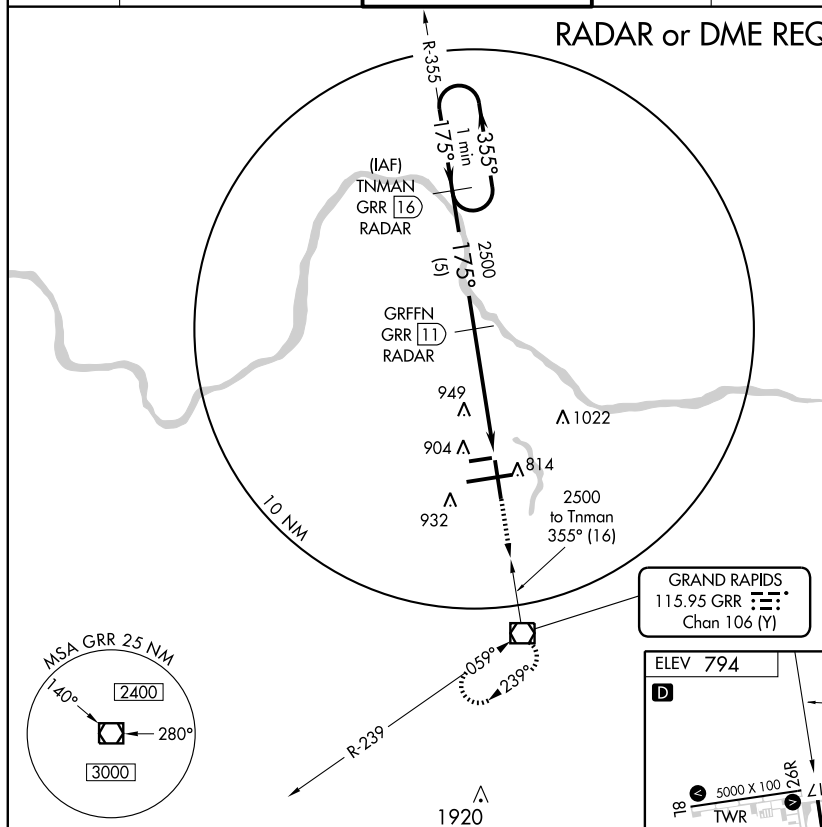
 ATIS
127.1

 GRAND RAPIDS APP CON ★
128.4 257.6

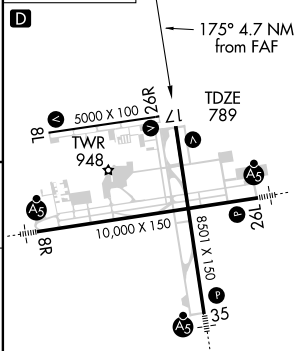
 GRAND RAPIDS TOWER ★
135.65 (CTAF) 0 339.8

 GND CON
121.8

 CLNC DEL
119.3

 UNICOM
122.95
RADAR or DME REQUIRED
 GRAND RAPIDS
 115.95 GRR
 Chan 106 (Y)

ELEV 794



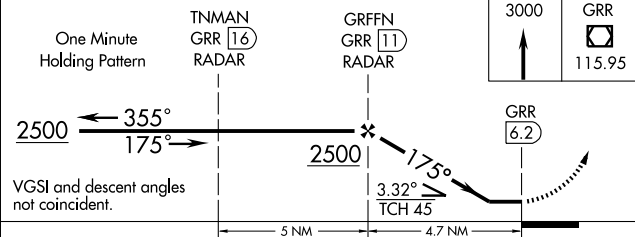
MIRL Rwy 8L-26R

REIL Rwy 8L, 26R and 17

HIRL Rwy 8R-26L and 17-35

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



CATEGORY	A	B	C	D
S-17	1200-1	411 (500-1)	1200-1½	411 (500-1½)
CIRCLING	1280-1	486 (500-1)	1280-1½	1360-2
			486 (500-1½)	566 (600-2)

GRAND RAPIDS, MICHIGAN

Orig-C 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

VOR RWY 17

VOR/DME GRR Chan 115.95 106 (Y)	APP CRS 355°	Rwy Idg TDZE Apt Elev	8501 790 794
---	------------------------	-----------------------------	---

VOR RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

▼ When local altimeter setting not received, use Holland altimeter setting and increase all MDA 80 feet, S-35 Cat C visibility to RVR 5000, Cat D to RVR 6000, ALSKA INT minimums S-35 Cat C to RVR 4000.
 ▲ ASR For inoperative MALSR, increase ALSKA INT minimums S-35 Cat D visibility to RVR 6000.

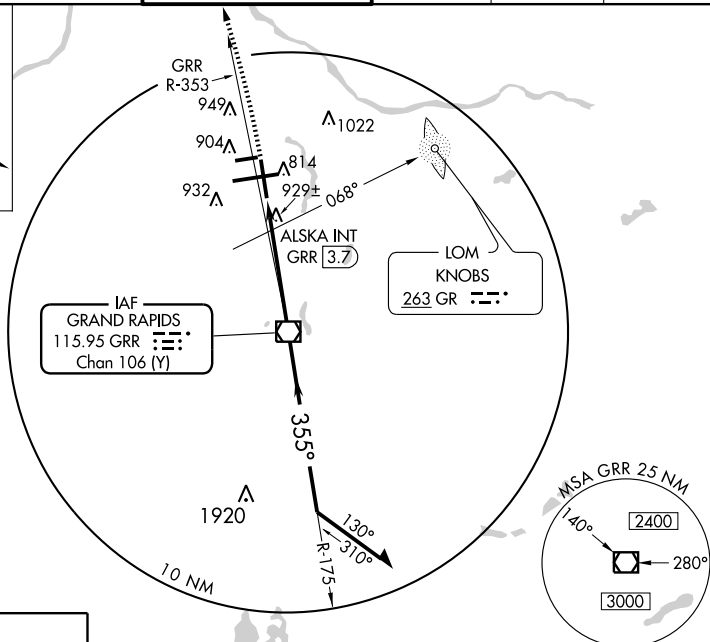
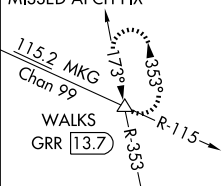
MALSR



MISSED APPROACH: Climb to 3000 via GRR VOR/DME R-353 to WALKS INT/GRR 13.7 DME and hold.

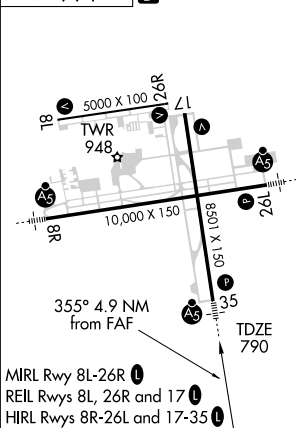
ATIS 127.1	GRAND RAPIDS APP CON ★ 128.4 257.6	GRAND RAPIDS TOWER ★ 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
----------------------	--	--	-------------------------	--------------------------	-------------------------

MISSED APCH FIX



ELEV 794

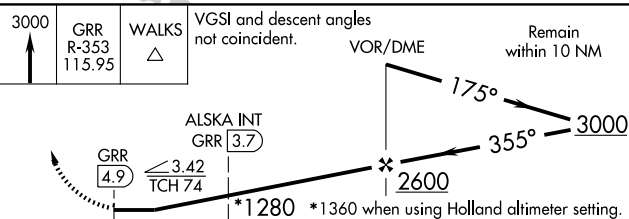
D



FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

GRAND RAPIDS, MICHIGAN

Amdt 1 10154



CATEGORY	A	B	C	D
S-35	1280/24	490 (500-½)	1280/40 490 (500-¾)	1280/50 490 (500-1)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)
ALSKA INT MINIMUMS				
S-35	1180/24 390 (400-½)			1180/50 390 (400-1)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

VOR RWY 35

GRAYLING AAF (GOV)(KGOV) CIV/MIL 1 NW UTC-5(-4DT) N44°40.82' W84°43.73'

LAKE HURON

1158 B TPA—See Remarks NOTAM FILE GOV

H-2K, L-31C

Rwy 05-23: H5000X150 (CONC) D-12 PCN 10 R/C/W/T MIRL

IAP

Rwy 05: REIL. PAPI(P4L)—GA 4.0' TCH 41'. Trees.

Rwy 23: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Trees.

Rwy 14-32: H5000X150 (ASPH) S-35, D-45, 2D-80

PCN 65 F/B/W/T MIRL

Rwy 14: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Tree.

Rwy 32: REIL. PAPI(P4L)—GA 3.5' TCH 34'. Thld dsplcd 300'.
Trees.

AIRPORT REMARKS: Attended dawn-dusk. Wildlife on and invof arpt.

Extensive military helicopter tfc Jun thru Aug. ACTIVATE MIRL Rwy 14-32 and Rwy 05-23, REIL Rwy 05, Rwy 23, Rwy 14 and Rwy 32 and PAPI Rwy 05, Rwy 23, Rwy 14 and Rwy 32—CTAF. Rwy 05-23, Twy A, Twy D and Twy E CLOSED winter months, no snow removal.

MILITARY REMARKS: TFC PAT—Rotary wing 2000(842), fixed wing

2200(1042). MISC Ctc Base OPS DSN 623-3301,

C989-344-4301 or C517-648-5339.

WEATHER DATA SOURCES: AWOS-3 119.075 (989) 348-3127.

COMMUNICATIONS: CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 132.9 338.3

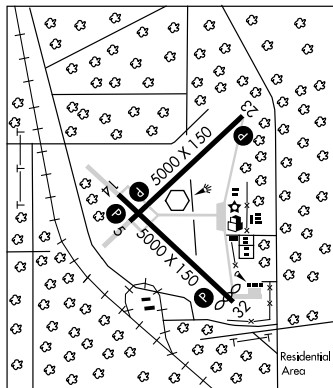
TOWER 126.2 241.0 (by NOTAM) GND CON 121.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 091° 35.2 NM to fld. 912/2W.
HIWAS.

(T) VORW 109.8 CGG N44°40.90' W84°43.74'. at fld. NOTAM FILE GOV. Unmonitored.

NDB (MHW) 359 GYG N44°45.00' W84°49.70' 140° 6 NM to fld. NOTAM FILE GOV.



GREEN LAKE (See INTERLOCHEN)

GREENVILLE MUNI (6D6) 3 S UTC-5(-4DT) N43°08.53' W85°15.23'

CHICAGO

855 B S4 FUEL 100LL NOTAM FILE LAN

L-281

Rwy 10-28: H4199X75 (ASPH) S-23 MIRL 0.4% up W

IAP

Rwy 10: PAPI(P4L)—GA 3.5' TCH 27'. Trees.

Rwy 28: REIL. PAPI(P4L)—GA 3.0' TCH 32'. Trees.

Rwy 18-36: 1730X200 (TURF)

Rwy 18: Trees. Rwy 36: Thld dsplcd 378'. Trees.

AIRPORT REMARKS: Attended Apr-Oct 1300-2200Z†, Nov-Mar

1300-0000Z†. Deer on and invof arpt. Snow removal Rwy 10-28

only. Rwy 18-36 no plowing, verify conditions prior to landing. Rwy

18-36 and dsplcd thld marked with 3' yellow cones. ACTIVATE

MIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z†)

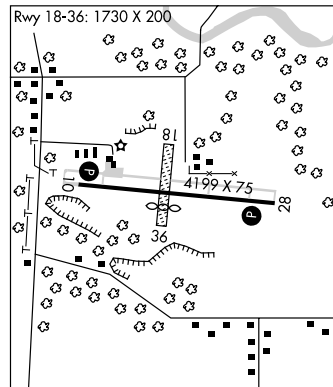
Ⓡ CHICAGO CENTER/APP DEP CON 124.6 (0500-1030Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.82' 031° 23.9 NM to fld.

803/4W. DME unmonitored.



NDB GYG 359	APP CRS 142°	Rwy Idg TDZE Apt Elev	5000 1151 1156
-----------------------	------------------------	-----------------------------	---

NDB RWY 14

GRAYLING AAF (GOV)

▼ Visibility reduction by helicopters NA.
 ▲ NA When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet and S-14 and Circling Cat B, C, and D visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct GYG NDB and hold.

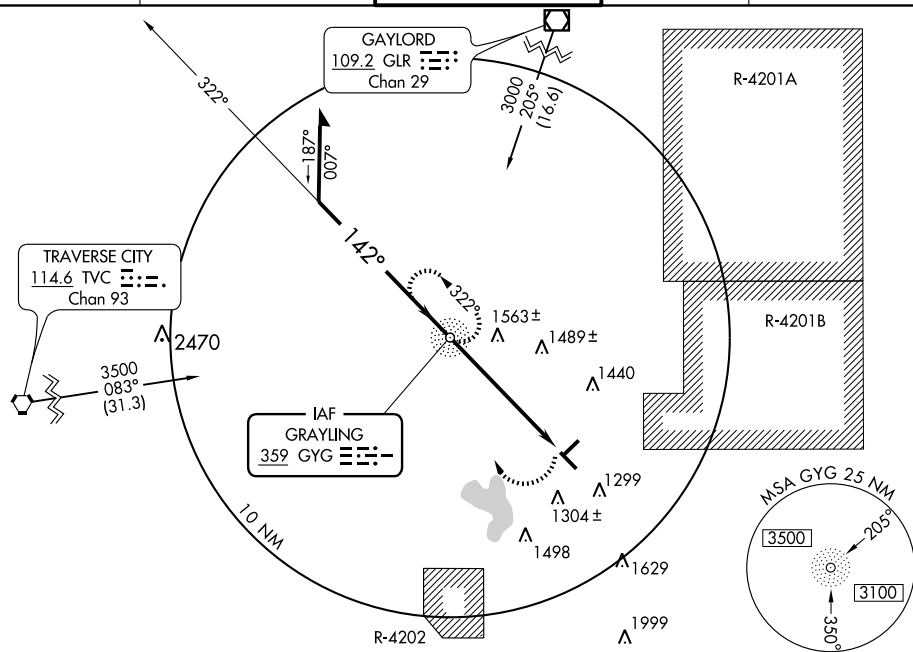
AWOS-3
119.075

MINNEAPOLIS CENTER
132.9 338.3

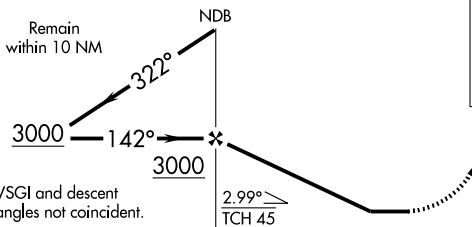
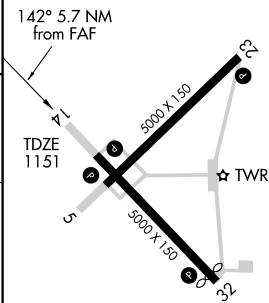
GRAYLING TOWER ★
126.2 241.0

GND CON
121.9

UNICOM
122.8 (CTAF) 0



ELEV 1156



CATEGORY	A	B	C	D
S-14	1880-1	729 (800-1)	1880-2 729 (800-2)	1880-2¼ 729 (800-2¼)
CIRCLING	1880-1	724 (800-1)	1880-2 724 (800-2)	1880-2¼ 724 (800-2¼)

REIL Rwy 5, 23, 14 and 32 0
 MIRL Rwy 5-23 and 14-32 0

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

APP CRS	Rwy Idg	5000
142°	TDZE	1151
	Apt Elev	1156

RNAV (GPS) RWY 14
GRAYLING AAF (GOV)

- A** When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet, increase LNAV Cat C and D and Circling Cat C visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climbing right turn to 3000 direct MAMER and hold.

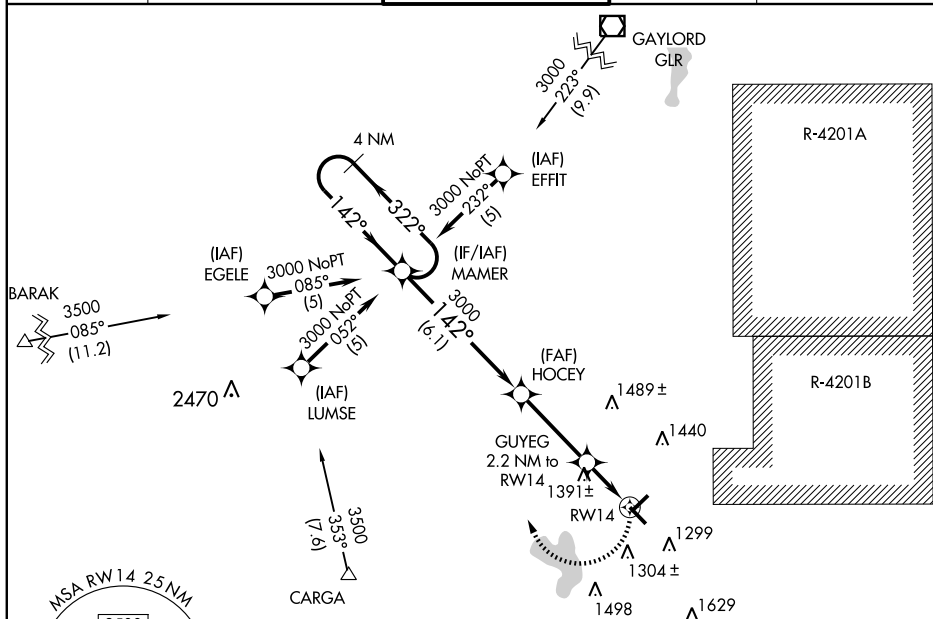
AWOS-3
119.075

MINNEAPOLIS CENTER
132.9 338.3

GRAYLING TOWER ★
126.2 241.0

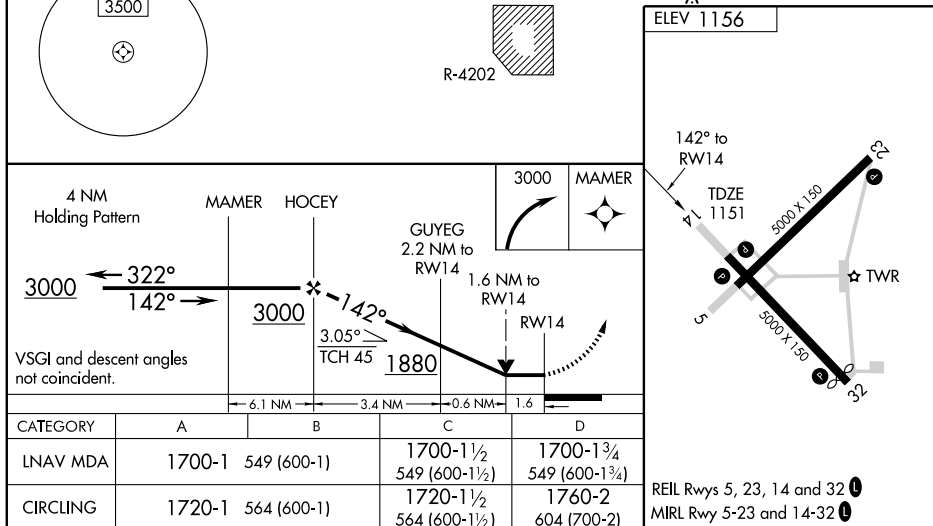
GND CON
121.9

UNICOM
122.8 (CTAF) **L**



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



GRAYLING, MICHIGAN
Orig 10154

44°41'N - 84°44'W

GRAYLING AAF (GOV)
RNAV (GPS) RWY 14

VOR CGG 109.8	APP CRS 127°	Rwy Idg TDZE Apt Elev	5000 1151 1156
-------------------------	------------------------	-----------------------------	---

VOR RWY 14

GRAYLING AAF (GOV)

▼ Visibility reduction by helicopters NA.
▲ NA When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet, increase S-14 and Circling Cat B, C, and D and GORDN Fix minimums S-14 Cat C and D and Circling Cat C visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climbing right turn to 3500 in CGG VOR holding pattern.

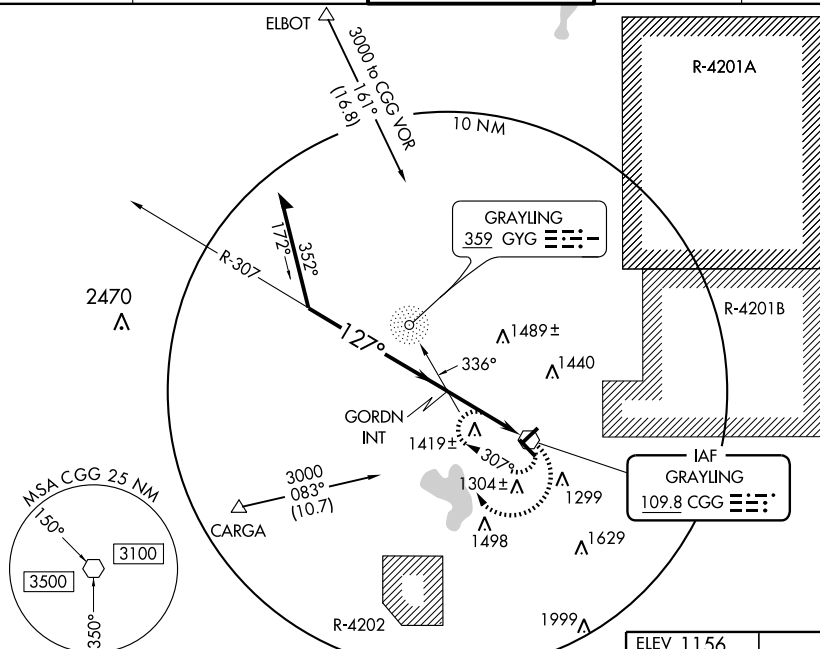
AWOS-3
119.075

MINNEAPOLIS CENTER
132.9 338.3

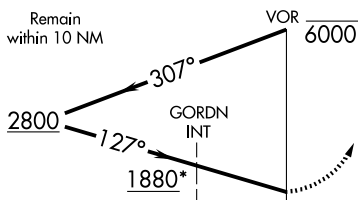
GRAYLING TOWER ★
126.2 241.0

GND CON
121.9

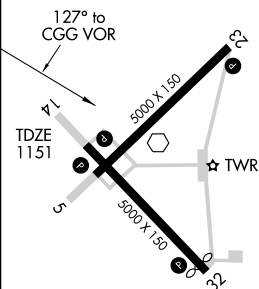
UNICOM
122.8 (CTAF) ①



ELEV 1156



3500 CGG



CATEGORY	A	B	C	D
S-14	1880-1 729 (800-1)		1880-2 729 (800-2)	1880-2 1/4 729 (800-2 1/4)
CIRCLING	1880-1 724 (800-1)		1880-2 724 (800-2)	1880-2 1/4 724 (800-2 1/4)
GORDN FIX MINIMUMS				
S-14	1720-1 569 (600-1)		1720-1 1/2 569 (600-1 1/2)	1720-1 3/4 569 (600-1 3/4)
CIRCLING	1720-1 564 (600-1)		1720-1 1/2 564 (600-1 1/2)	1760-2 604 (700-2)

REIL Rwy 5, 23, 14 and 32 ①
 MIRL Rwy 5-23 and 14-32 ①

GRAYLING AAF (GOV)(KGOV) CIV/MIL 1 NW UTC-5(-4DT) N44°40.82' W84°43.73'

LAKE HURON

1158 B TPA—See Remarks NOTAM FILE GOV

H-2K, L-31C

Rwy 05-23: H5000X150 (CONC) D-12 PCN 10 R/C/W/T MIRL

IAP

Rwy 05: REIL. PAPI(P4L)—GA 4.0° TCH 41'. Trees.

Rwy 23: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

Rwy 14-32: H5000X150 (ASPH) S-35, D-45, 2D-80

PCN 65 F/B/W/T MIRL

Rwy 14: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

Rwy 32: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Thld dsplcd 300'.
Trees.

AIRPORT REMARKS: Attended dawn-dusk. Wildlife on and invof arpt.

Extensive military helicopter tfc Jun thru Aug. ACTIVATE MIRL Rwy 14-32 and Rwy 05-23, REIL Rwy 05, Rwy 23, Rwy 14 and Rwy 32 and PAPI Rwy 05, Rwy 23, Rwy 14 and Rwy 32—CTAF. Rwy 05-23, Twy A, Twy D and Twy E CLOSED winter months, no snow removal.

MILITARY REMARKS: TFC PAT—Rotary wing 2000(842), fixed wing

2200(1042). MISC Ctc Base OPS DSN 623-3301,

C989-344-4301 or C517-648-5339.

WEATHER DATA SOURCES: AWOS-3 119.075 (989) 348-3127.

COMMUNICATIONS: CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 132.9 338.3

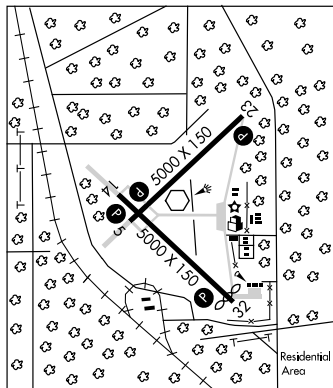
TOWER 126.2 241.0 (by NOTAM) GND CON 121.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 091° 35.2 NM to fld. 912/2W.
HIWAS.

(T) VORW 109.8 CGG N44°40.90' W84°43.74'. at fld. NOTAM FILE GOV. Unmonitored.

NDB (MHW) 359 GYG N44°45.00' W84°49.70' 140° 6 NM to fld. NOTAM FILE GOV.



GREEN LAKE (See INTERLOCHEN)

GREENVILLE MUNI (6D6) 3 S UTC-5(-4DT) N43°08.53' W85°15.23'

CHICAGO

855 B S4 FUEL 100LL NOTAM FILE LAN

L-281

Rwy 10-28: H4199X75 (ASPH) S-23 MIRL 0.4% up W

IAP

Rwy 10: PAPI(P4L)—GA 3.5° TCH 27'. Trees.

Rwy 28: REIL. PAPI(P4L)—GA 3.0° TCH 32'. Trees.

Rwy 18-36: 1730X200 (TURF)

Rwy 18: Trees. Rwy 36: Thld dsplcd 378'. Trees.

AIRPORT REMARKS: Attended Apr-Oct 1300-2200Z†, Nov-Mar

1300-0000Z†. Deer on and invof arpt. Snow removal Rwy 10-28 only. Rwy 18-36 no plowing, verify conditions prior to landing. Rwy 18-36 and dsplcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z†)

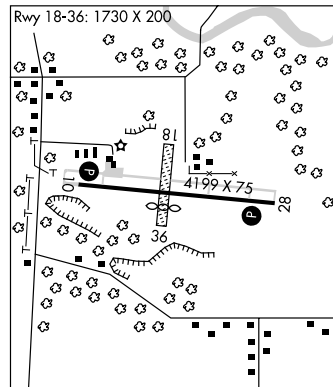
Ⓡ CHICAGO CENTER/APP DEP CON 124.6 (0500-1030Z†)

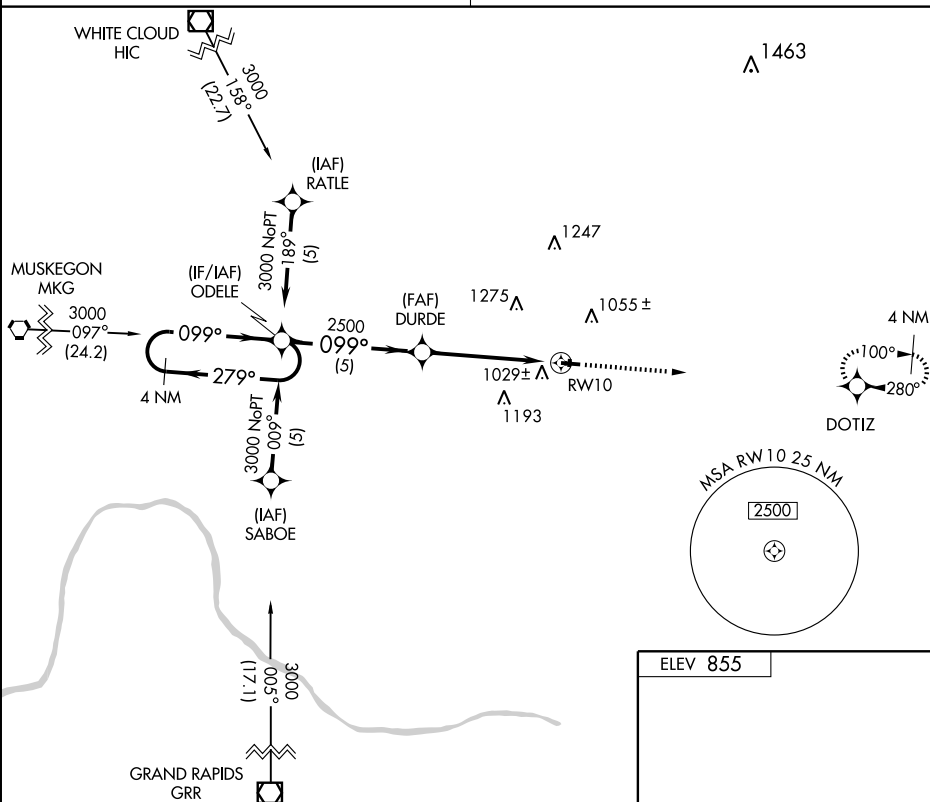
RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.82' 031° 23.9 NM to fld.

803/4W. DME unmonitored.



APP CRS
099°Rwy Idg **4199**
TDZE **855**
Apt Elev **855****RNAV (GPS) RWY 10**
GREENVILLE MUNI (6D6)Use Grand Rapids/Gerald R. Ford Intl altimeter setting.
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.MISSED APPROACH: Climb to 3000 via 100° course
to DOTIZ WP and hold.GRAND RAPIDS APP CON ★
124.6 257.6UNICOM
122.8 (CTAF) 0

ELEV 855

4 NM
Holding Pattern

ODELE

DURDE

3000
↑
CRS 100°3000 ← 279°
099° →

099°

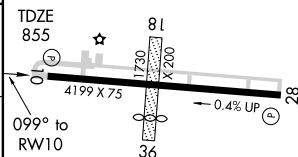
2500

RWY 10

VGSi and descent angles
not coincident.3.04°
TCH 40

5 NM

5 NM



CATEGORY	A	B	C	D
RNAV MDA	1340-1	485 (500-1)	1340-1½ 485 (500-1½)	NA
CIRCLING	1400-1	545 (600-1)	1420-1½ 565 (600-1½)	NA

REIL Rwy 28
MIRL Rwy 10-28 0

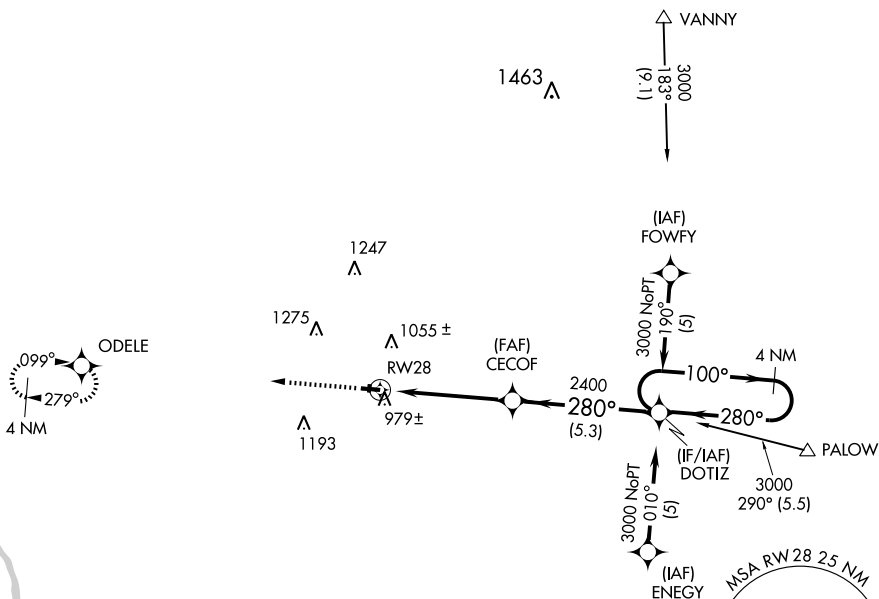
APP CRS
280°Rwy Idg **4199**
TDZE **847**
Apt Elev **855****RNAV (GPS) RWY 28**
GREENVILLE MUNI (6D6)

▼ Use Grand Rapids/Gerald R. Ford Intl altimeter setting.
 ▲ NA GPS or RNP-0.3 required.
 DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 via 280° course
to ODELE WP and hold.

GRAND RAPIDS APP CON ★
124.6 257.6

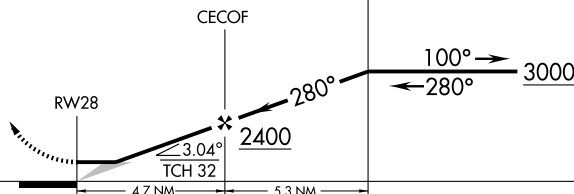
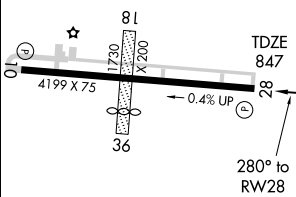
UNICOM
122.8 (CTAF) 0



ELEV 855

GRAND RAPIDS
GRR

3000
 CRS 280°
 ODELE



CATEGORY	A	B	C	D
RNAV MDA	1300-1	453 (500-1)	1300-1½ 453 (500-1½)	NA
CIRCLING	1400-1	545 (600-1)	1420-1½ 565 (600-1½)	NA

REIL Rwy 28
 MIRL Rwy 10-28 0

VOR/DME GRR 115.95 Chan 106 (Y)	APP CRS 031°	Rwy Idg TDZE Apt Elev	N/A N/A 855
---	------------------------	-----------------------------	--

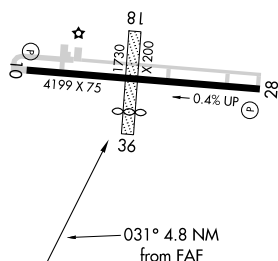
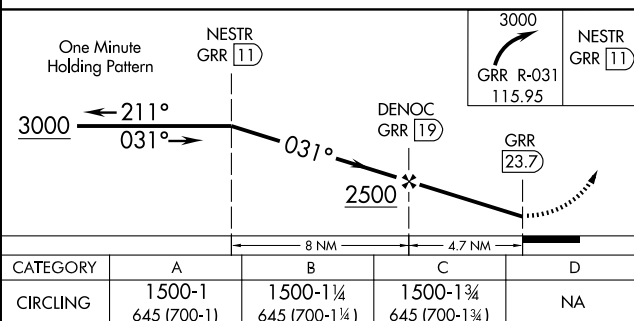
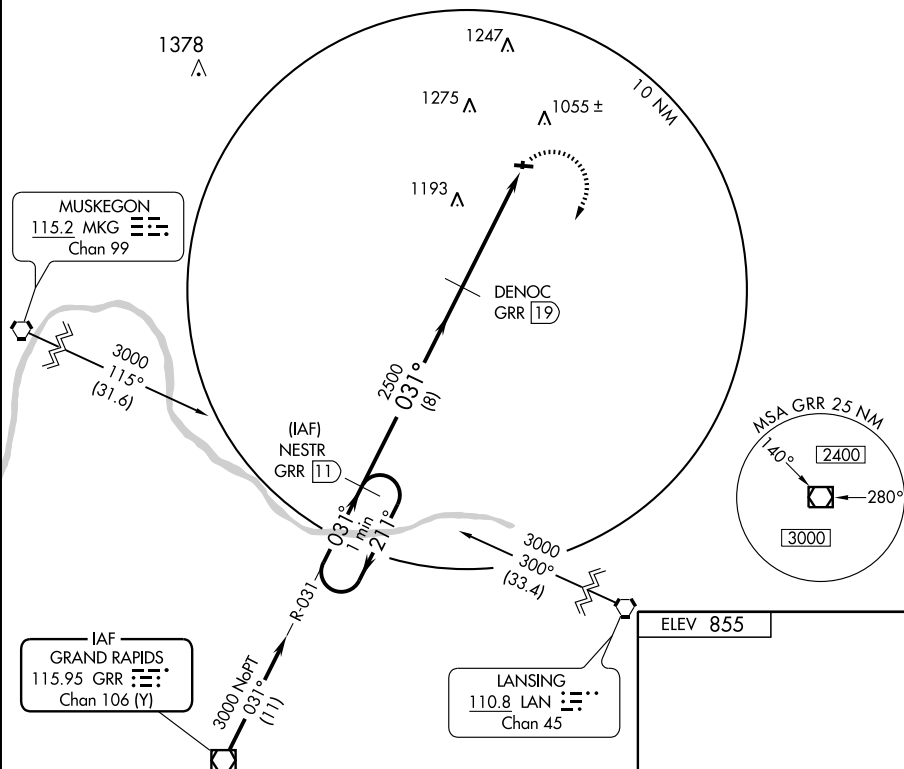
VOR/DME-A
GREENVILLE MUNI (6D6)

▼
▲ NA Use Grand Rapids/Gerald R. Ford Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 3000
via the GRR VOR/DME R-031 to NESTR and hold.

GRAND RAPIDS APP CON ★
124.6 257.6

UNICOM
122.8 (CTAF) 0



REIL Rwy 28
MIRL Rwy 10-28 0

HANCOCK**HOUGHTON CO MEM** (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34'**GREEN BAY**

1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX

H-21, L-14J

RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, 2S-127, 2D-185 HIRL 0.5% up NW IAP

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.

RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-PFC) S-35, D-50 MIRL 0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 0900-0500Z±. PAEW on arpt monitor CTAF. Frequent snow removal ops in progress various times Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr 15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 906-482-3970. Deer and gulls on and in/ov arpt. General aviation acft parking permitted in front of air carrier terminal building. Contact Unicom for permission to park in front of terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy 25, MALSR Rwy 31 and Twy B—CTAF. Airdfield guidance signs snow covered in winter. Ldg fee waived with fuel purchase for multi-engine acft only.

WEATHER DATA SOURCES: ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.**COMMUNICATIONS:** CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 127.2

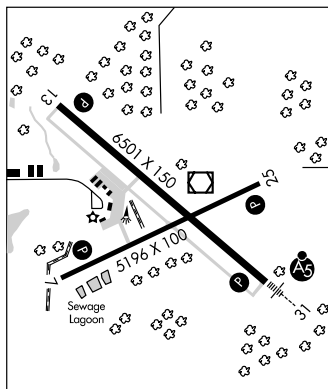
AIRSPACE: CLASS E svc continuous.**RADIO AIDS TO NAVIGATION:** NOTAM FILE CMX.

(L) VOR/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.

DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.

**HANLEY FLD** (See MUNISING)**HARBOR SPRINGS** (MGN) 3 E UTC-5(-4DT) N45°25.53' W84°54.80'**LAKE HURON**

686 B FUEL 100LL, JET A NOTAM FILE MGN

L-31B

RWY 10-28: H4157X75 (ASPH) S-22, D-30 MIRL (NSTD)

IAP

RWY 10: PAPI(P4R)—GA 3.5° TCH 25. Thld dsplcd 445'. Trees.

RWY 28: (NSTD) PAPI(P4L)—GA 4.0° TCH 35. Thld dsplcd 445'.

Trees.

AIRPORT REMARKS: Attended 1300-dusk. Parachute Jumping. Birds and deer on and in/ov arpt. Rwy 28 +46' antenna 186' from dsplcd thld 234' right. Noise abatement procedures; no turbojet/turbopfan acft departures from 0400 to 1200Z±, no low flight over surrounding community, all acft departing to the W turn S over the water as soon as practical. ACTIVATE NSTD MIRL Rwy 10-28—CTAF. Landing fee waived with minimum fuel purchase.

WEATHER DATA SOURCES: AWOS-3 119.925 (231) 347-5231.**COMMUNICATIONS:** CTAF/UNICOM 122.8

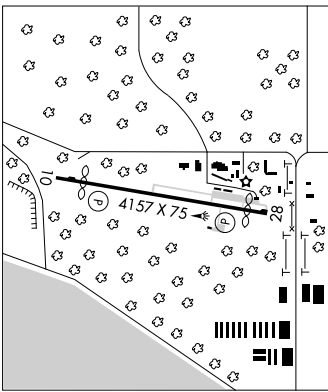
① MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 227° 16.2 NM to fld. 840/6W.

HIWAS.

COMM/NAV/WEATHER REMARKS: AWOS-3 Wind unreliable btn 260°-280°.

LOC/DME I-CMX 110.3 Chan 40	APP CRS 313°	Rwy Idg TDZE 1070 Apt Elev 1095
---	------------------------	---

ILS or LOC RWY 31

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

For inoperative MALSR, increase S-LOC 31 Cat D visibility to 1 mile.

When local altimeter setting not received use Marquette altimeter setting and increase DA to 1441 and S-ILS 31 visibility to $\frac{3}{4}$, increase all MDA 180' and S-LOC 31 visibility Cat C to $\frac{3}{4}$ mile, Cat D to 1 mile. Increase Circling Cat C visibility to $1\frac{3}{4}$ mile, Cat D visibility to $2\frac{1}{2}$ mile. For inoperative MALSR when using Marquette altimeter setting increase S-ILS 31 visibility all Cats to $1\frac{1}{4}$ mile. VDP NA when using Marquette altimeter setting. Request MIRL Rwy 7-25 CTAf.

MALSR



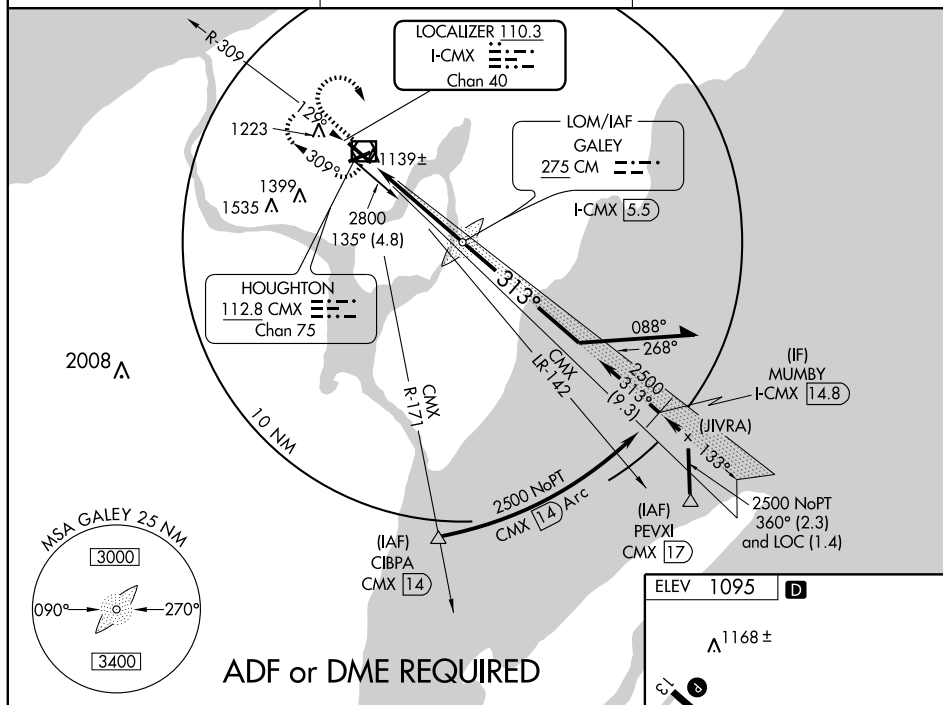
MISSED APPROACH:

Climb to 3100 then right turn direct CMX VOR/DME and hold.

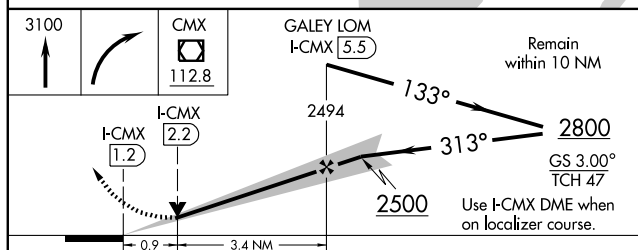
ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

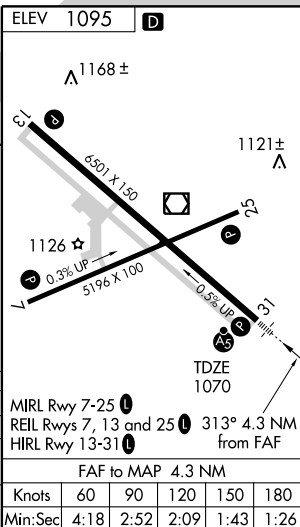
UNICOM
122.7 (CTAF) 0



ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 31		1270- $\frac{1}{2}$ 200 (200- $\frac{1}{2}$)		
S-LOC 31		1400- $\frac{1}{2}$ 330 (400- $\frac{1}{2}$)		
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640- $\frac{1}{2}$ 545 (600- $\frac{1}{2}$)	1400- $\frac{3}{4}$ 330 (400- $\frac{3}{4}$) 1780-2 $\frac{1}{4}$ 685 (700-2 $\frac{1}{4}$)



MIRL Rwy 7-25 0
REIL Rwy 7, 13 and 25 0 313° 4.3 NM from FAF
HIRL Rwy 13-31 0

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

LOC/DME I-CMX <u>110.3</u> Chan 40	APP CRS 133°	Rwy Idg 6501 TDZE 1095 Apt Elev 1095
--	------------------------	---

LOC/DME BC RWY 13


HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

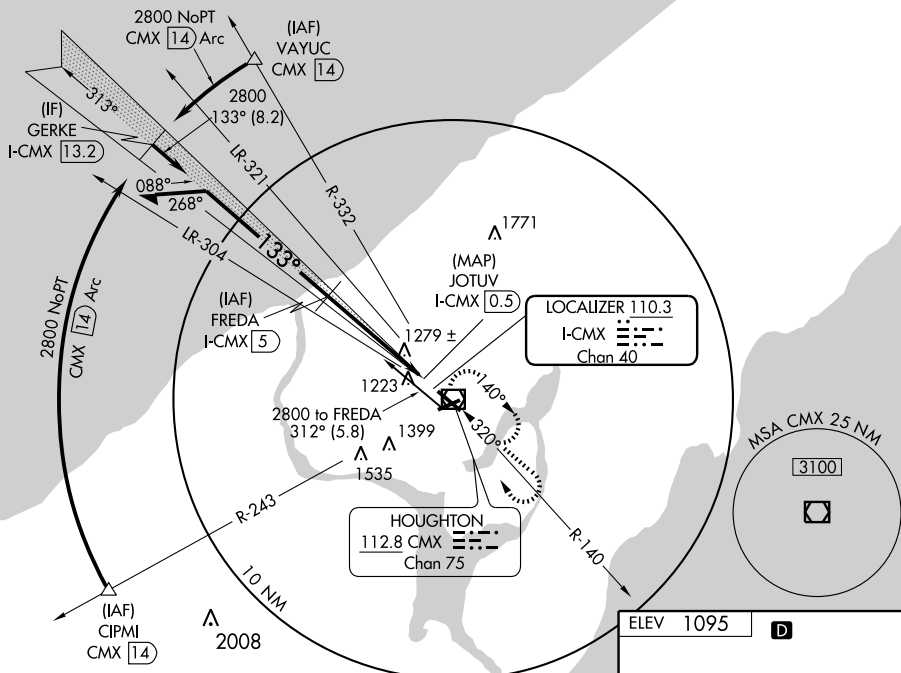
- T** Request MRL Rwy 7-25 CTAF.
A When local altimeter setting not received use Marquette altimeter setting and increase all MDA 180 feet and S-13 Cat C and D visibility ½ mile, increase Circling visibility Cat C and D ¼ mile.
VDP NA when using Marquette altimeter setting.

MISSED APPROACH: Climb to 3100 then right turn direct CMX VOR/DME and hold.

ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

UNICOM
122.7 (CTAF) 



BACK COURSE

ELEV	1095	D
------	------	---

Remain
within 10 NM

Use I-CMX DME when on localizer course
Disregard glide slope indications.

TCH 42

ICH 43

→ 3.9 N

B

...

0-1)

540-1

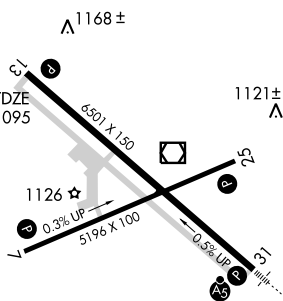
(100.1)

(600-1)

3100

CMX

112.8



MIRL Rwy 7-25 **L**
REIL Rwys 7, 13 and 25 **L**
HIRL Rwy 13-31 **L**

HANCOCK, MICHIGAN
Amdt 12 10042

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)
47°10'N - 88°29'W LOC/DME BC PWY 13

LOC/DME BC RWY 13

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

APP CRS **069°**
 Rwy Idg **5196**
 TDZE **1067**
 Apt Elev **1095**

RNAV (GPS) RWY 7

HANCOCK/ HOUGHTON COUNTY MEMORIAL (CMX)

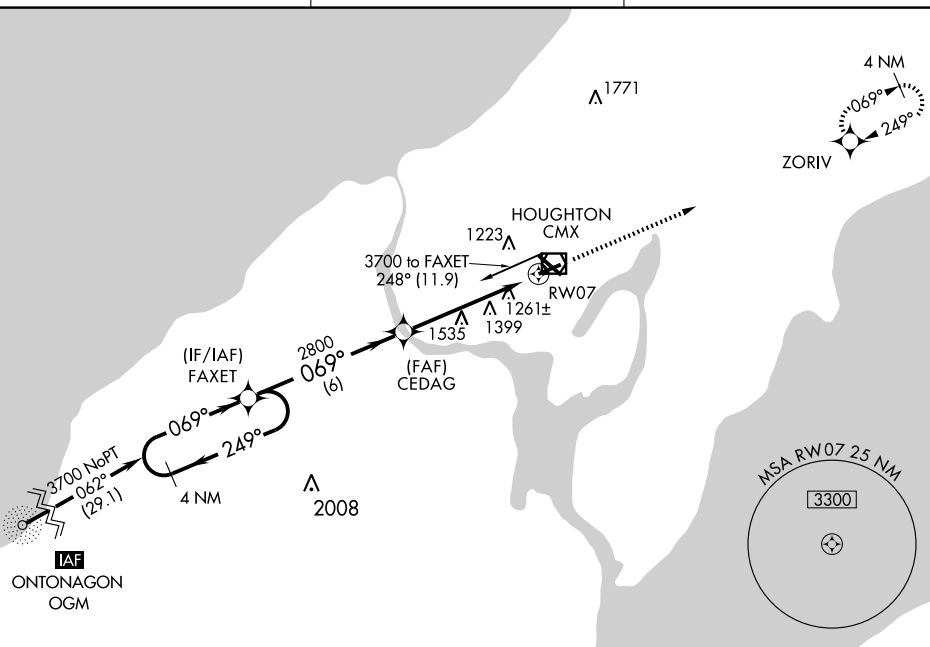
▼ Baro-VNAV NA below -17°C (2°F).
▲ NA GPS or RNP -0.3 required.
 DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 3700 via 069° course to ZORIV WP and hold.

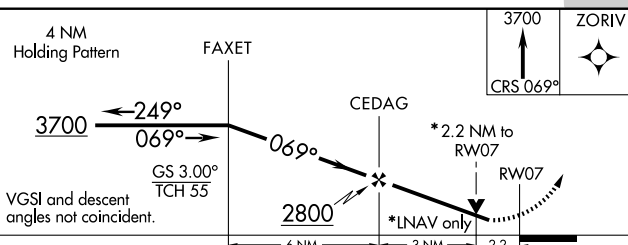
ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

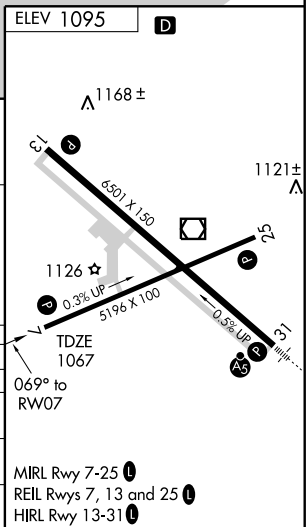
UNICOM
122.7 (CTAF) 0



IAF ARM APPROACH MODE PRIOR TO IAF.



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	1520-1½ 453 (500-1½)			
LNAV MDA	1840-1 773 (800-1)	1840-1¼ 773 (800-1¼)	1840-2¼ 773 (800-2¼)	1840-2½ 773 (800-2½)
CIRCLING	1840-1½ 745 (800-1½)		1840-2¼ 745 (800-2¼)	1840-2½ 745 (800-2½)



APP CRS **133°**
 Rwy Idg **6501**
 TDZE **1095**
 Apt Elev **1095**

RNAV (GPS) RWY 13

HANCOCK/ HOUGHTON COUNTY MEMORIAL (CMX)



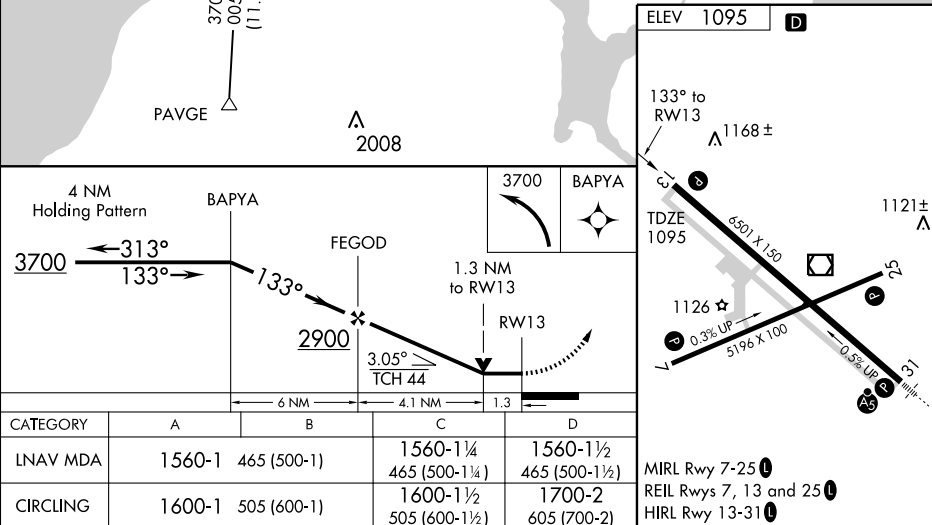
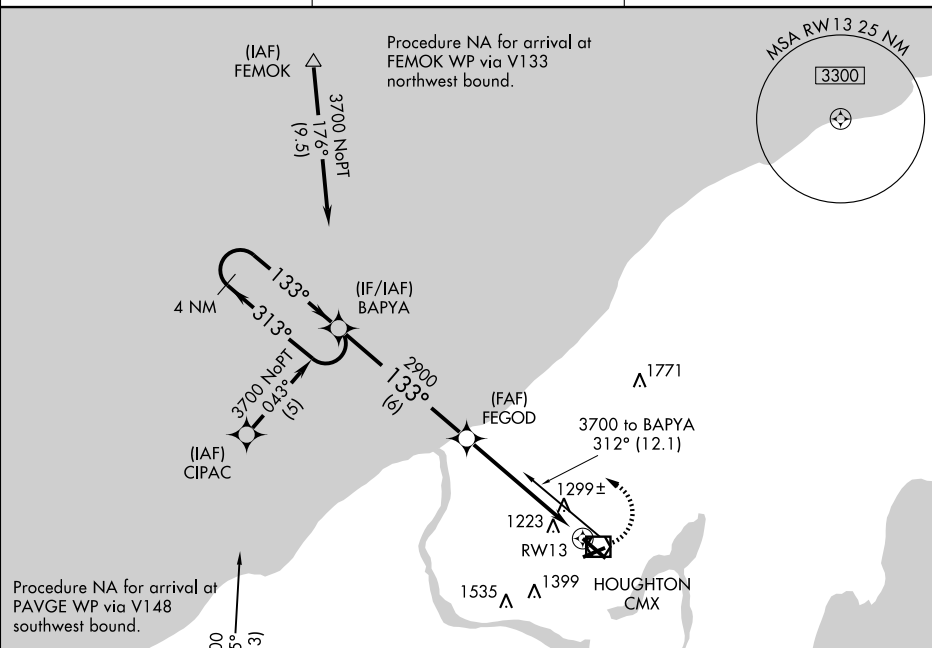
GPS or RNP-0.3 required.
 DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3700 direct
 BAPYA WP and hold.

ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

UNICOM
122.7 (CTAF) 0



APP CRS
249°

Rwy Idg **5196**
TDZE **1074**
Apt Elev **1095**

RNAV (GPS) RWY 25

HANCOCK/HOUGHTON COUNTY MEMORIAL (CMX)



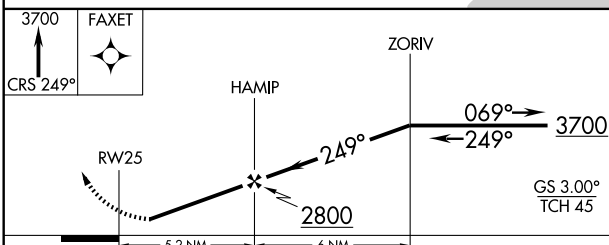
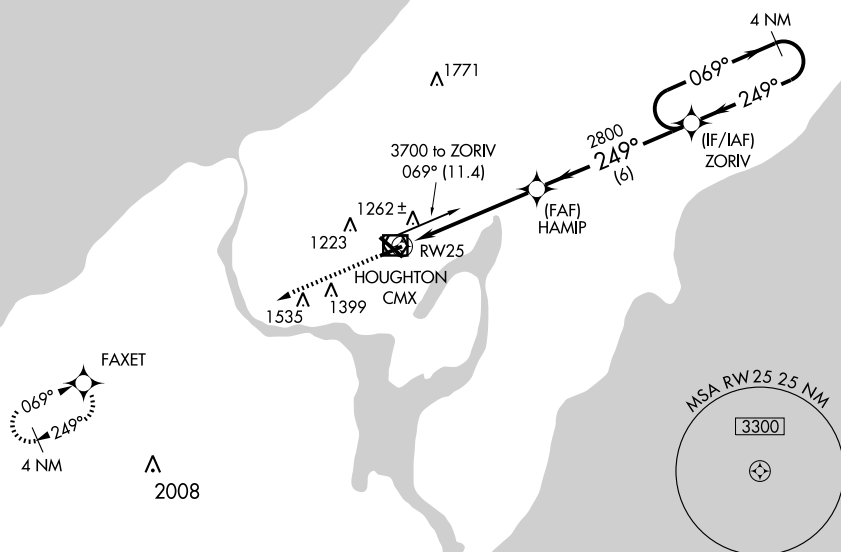
Baro-VNAV NA below -17°C (2°F)
GPS or RNP -0.3 required.
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 3700 via 249° course to FAXET WP and hold.

ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

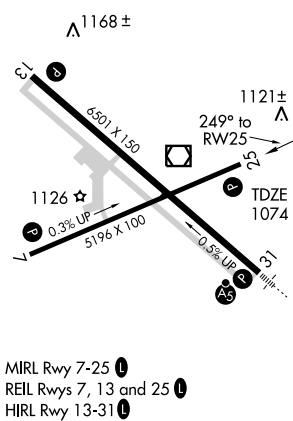
UNICOM
122.7 (CTAF) 0



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	1520-1½ 446 (500-1½)			
LNAV MDA	1520-1 446 (500-1)	1520-1¼ 446 (500-1¼)	1520-1½ 446 (500-1½)	
CIRCLING	1580-1½ 485 (500-1½)			1700-2 605 (700-2)

ELEV 1095

D



MIRL Rwy 7-25 0
REIL Rwy 7, 13 and 25 0
HIRL Rwy 13-31 0

VOR/DME CMX	APP CRS	Rwy Idg	5196
112.8	260°	TDZE	1074
Chan 75		Apt Elev	1095

VOR RWY 25

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

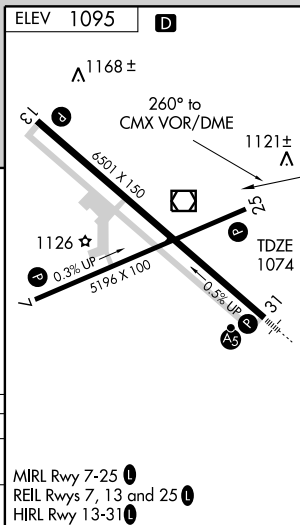
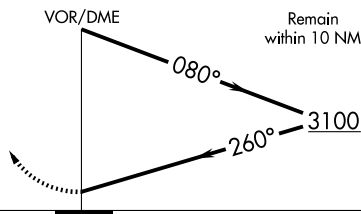
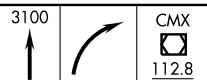
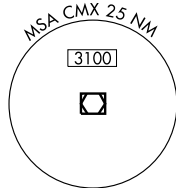
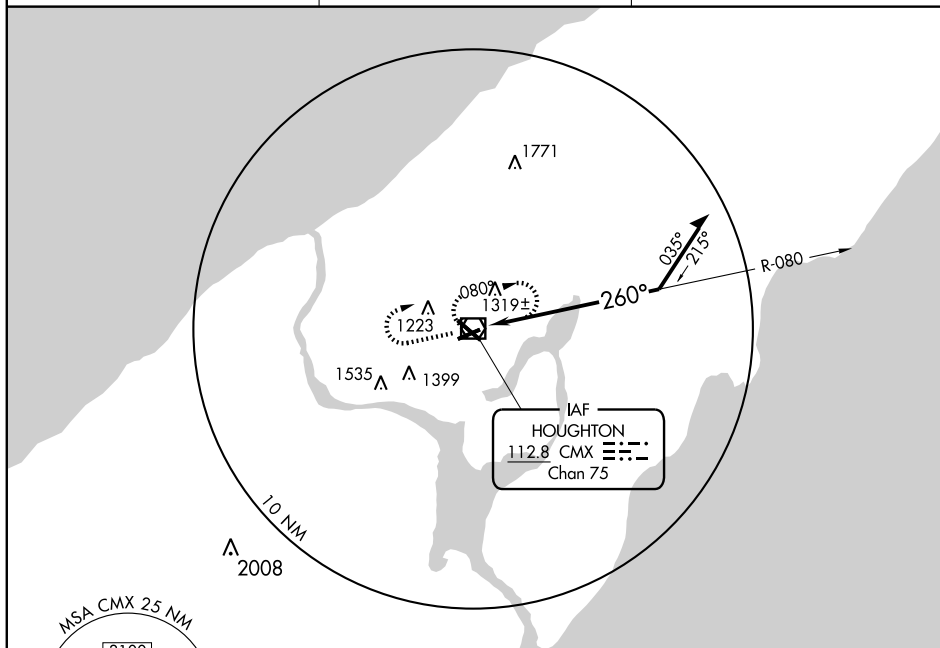


MISSED APPROACH: Climb to 3100, then right turn direct CMX VOR/DME and hold.

ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

UNICOM
122.7 (CTAF) 0



CATEGORY	A	B	C	D
S-25	1620-1	546 (600-1)	1620-1½ 546 (600-1½)	1620 1¾ 546 (600-1¾)
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640-1½ 545 (600-1½)	1780-2¼ 685 (700-2¼)

VOR RWY 25

VOR/DME CMX <u>112.8</u> Chan 75	APP CRS 320°	Rwy Idg 6501 TDZE 1070 Apt Elev 1095
--	------------------------	---

VOR RWY 31

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)



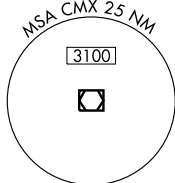
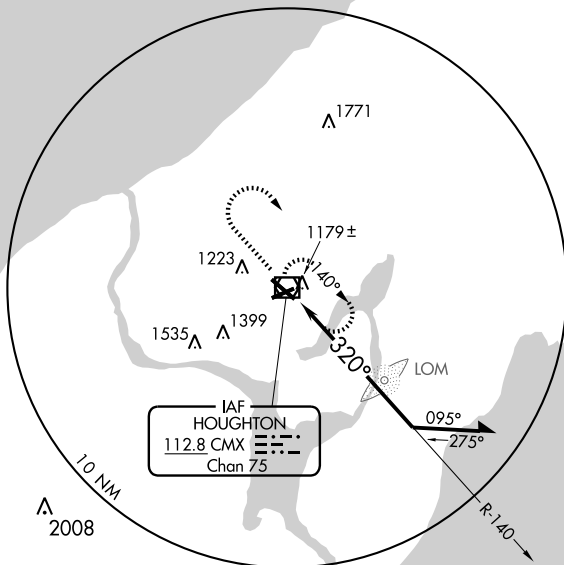
Request MIRL Rwy 7-25 CTAF.



MISSED APPROACH: Climb to 2800, then right turn direct CMX VOR/DME and hold.

ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

UNICOM
122.7 (CTAF) **L**

2800



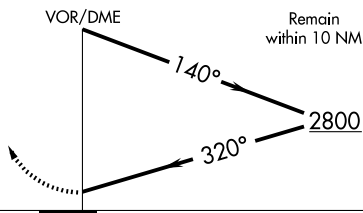
CMX



112.8

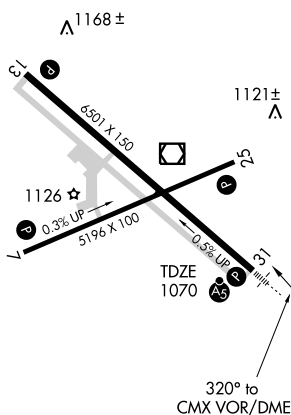
VOR/DME

Remain
within 10 NM



CATEGORY	A	B	C	D
S-31	1500- $\frac{1}{2}$ 430 (500- $\frac{1}{2}$)		1500- $\frac{3}{4}$ 430 (500- $\frac{3}{4}$)	1500-1 430 (500-1)
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640-1 $\frac{1}{2}$ 545 (600-1 $\frac{1}{2}$)	1780-2 $\frac{1}{4}$ 685 (700-2 $\frac{1}{4}$)

ELEV 1095



MIRL Rwy 7-25 **L**
REIL Rwys 7, 13 and 25 **L**
HIRL Rwy 13-31 **L**

HANCOCK

HOUGHTON CO MEM (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34'

GREEN BAY

1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX

H-21, L-14J

RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, 2S-127, 2D-185 HIRL 0.5% up NW

IAP

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.

RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-PFC) S-35, D-50 MIRL
0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 0900-0500Z. PAEW on arpt monitor
CTAF. Frequent snow removal ops in progress various times
Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr
15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with
more than 30 passenger seats except PPR call arpt manager
906-482-3970. Deer and gulls on and invof arpt. General
aviation acft parking permitted in front of air carrier terminal
building. Contact Unicom for permission to park in front of
terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE
HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy
25, MALSR Rwy 31 and Twy B—CTAF. Airfield guidance signs snow covered in winter. Ldg fee waived with fuel
purchase for multi-engine acft only.

WEATHER DATA SOURCES: ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.

COMMUNICATIONS: CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 127.2

AIRSPACE: CLASS E svc continuous.

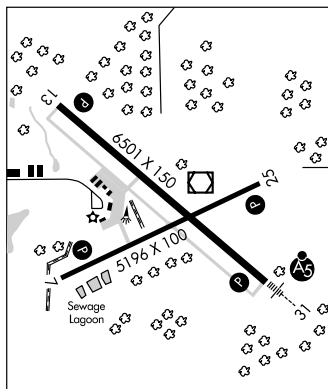
RADIO AIDS TO NAVIGATION: NOTAM FILE CMX.

(L) VOR/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.

DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left
and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.



HANLEY FLD (See MUNISING)

HARBOR SPRINGS (MGN) 3 E UTC-5(-4DT) N45°25.53' W84°54.80'

LAKE HURON

686 B FUEL 100LL, JET A NOTAM FILE MGN

L-31B

RWY 10-28: H4157X75 (ASPH) S-22, D-30 MIRL (NSTD)

IAP

RWY 10: PAPI(P4R)—GA 3.5° TCH 25. Thld dspcd 445'. Trees.

RWY 28: (NSTD) PAPI(P4L)—GA 4.0° TCH 35. Thld dspcd 445'.
Trees.

AIRPORT REMARKS: Attended 1300-dusk. Parachute Jumping. Birds and
deer on and invof arpt. Rwy 28 +46' antenna 186' from dspcd
thld 234' right. Noise abatement procedures; no turbojet/turbopfan
acft departures from 0400 to 1200Z, no low flight over
surrounding community, all acft departing to the W turn S over the
water as soon as practical. ACTIVATE NSTD MIRL Rwy
10-28—CTAF. Landing fee waived with minimum fuel purchase.

WEATHER DATA SOURCES: AWOS-3 119.925 (231) 347-5231.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

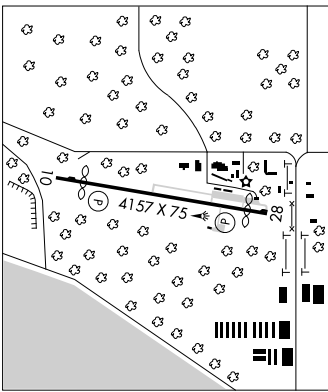
RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 227° 16.2 NM to fld. 840/6W.

HIWAS.

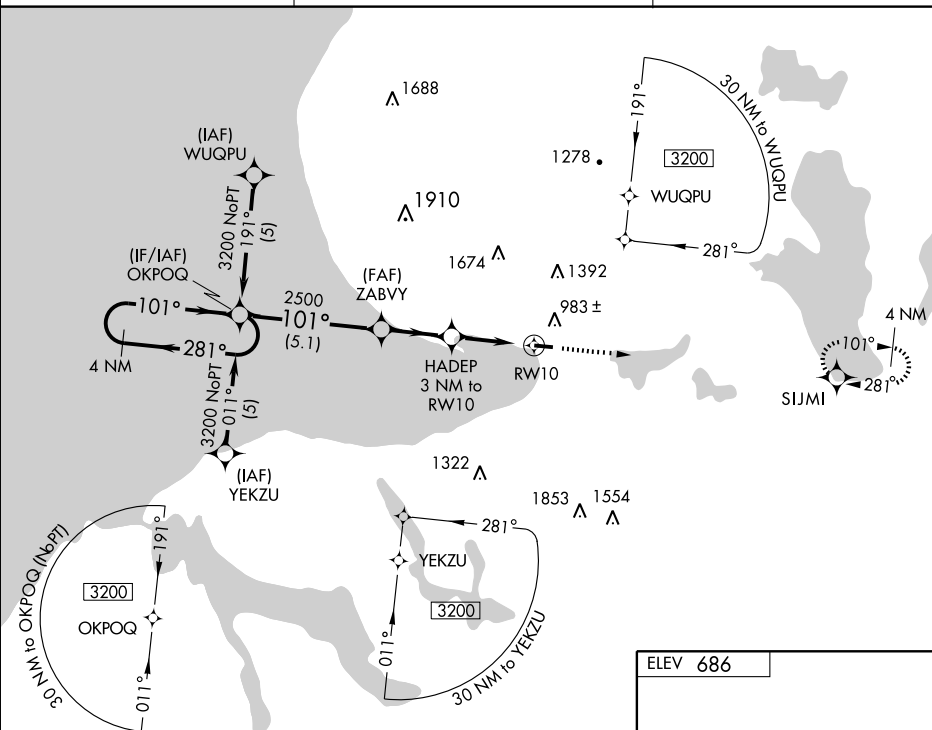
COMM/NAV/WEATHER REMARKS: AWOS-3 Wind unreliable btn 260°-280°.



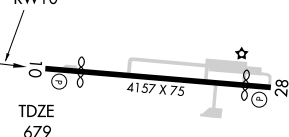
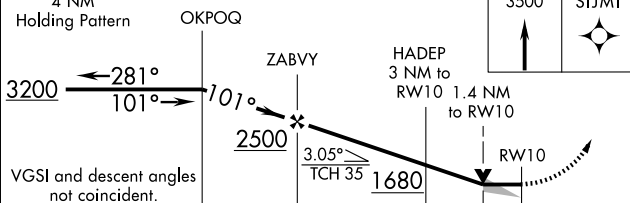
APP CRS
101°Rwy Idg **3712**
TDZE **679**
Apt Elev **686****RNAV (GPS) RWY 10**
HARBOR SPRINGS (MGN)

▼ DME/DME RNP-0.3 NA. VDP NA when using Pellston altimeter setting. When local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 3500 direct SIJMI and hold.

AWOS-3
119.925MINNEAPOLIS CENTER
134.6 354.05UNICOM
122.8 (CTAF) 0ELEV **686**

Λ 854

101° to
RWY 10MRL Rwy 10-28 **0 ***4 NM
Holding PatternVGS and descent angles
not coincident.

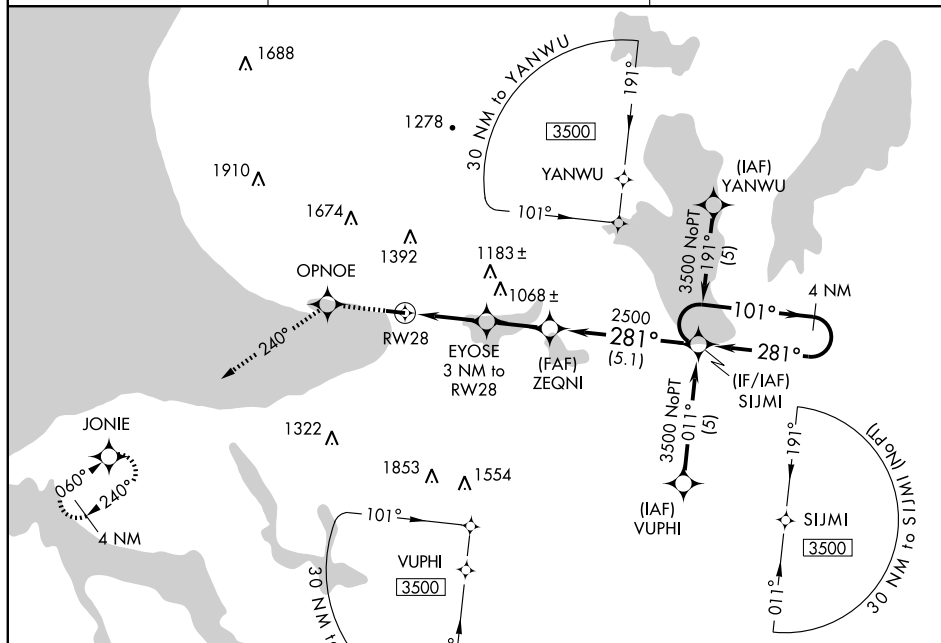
CATEGORY	A	B	C	D
LNAV MDA	1240-1	561 (600-1)	NA	NA
CIRCLING	1380-1 694 (700-1)	1500-1¼ 814 (900-1¼)	NA	NA

APP CRS
281°Rwy Idg **3712**
TDZE **686**
Apt Elev **686****RNAV (GPS) RWY 28**

HARBOR SPRINGS (MGN)

▼ DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
 ▲ When local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 40 feet.

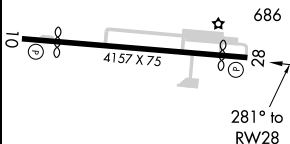
MISSED APPROACH: Climb to 3400 direct
 OPNOE and via 240° track to JONIE and hold.

AWOS-3
119.925MINNEAPOLIS CENTER
134.6 354.05UNICOM
122.8 (CTAF) 0

ELEV 686

▲ 854

TDZE 686



3400

OPNOE

JONIE

TRK 224°

SIJMI

4 NM
Holding Pattern

EYOSE

3 NM to
RW28

ZEIQNI

101° →

3500

← 281°

RW28

1680

2500

VGSI and descent
angles not coincident

CATEGORY

A

B

C

D

LNAV MDA

1120-1 434 (500-1)

NA

CIRCLING

1380-1 694 (700-1)

1500-1 814 (900-1¼)

NA

MIRL Rwy 10-28 0 *



VORTAC PLN
111.8
Chan 55

APP CRS
047°

Rwy Idg	TDZE	Apt Elev
1	10	10
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	10	10
9	10	10
10	10	10
11	10	10
12	10	10
13	10	10
14	10	10
15	10	10
16	10	10
17	10	10
18	10	10
19	10	10
20	10	10
21	10	10
22	10	10
23	10	10
24	10	10
25	10	10
26	10	10
27	10	10
28	10	10
29	10	10
30	10	10
31	10	10
32	10	10
33	10	10
34	10	10
35	10	10
36	10	10
37	10	10
38	10	10
39	10	10
40	10	10
41	10	10
42	10	10
43	10	10
44	10	10
45	10	10
46	10	10
47	10	10
48	10	10
49	10	10
50	10	10
51	10	10
52	10	10
53	10	10
54	10	10
55	10	10
56	10	10
57	10	10
58	10	10
59	10	10
60	10	10
61	10	10
62	10	10
63	10	10
64	10	10
65	10	10
66	10	10
67	10	10
68	10	10
69	10	10
70	10	10
71	10	10
72	10	10
73	10	10
74	10	10
75	10	10
76	10	10
77	10	10
78	10	10
79	10	10
80	10	10
81	10	10
82	10	10
83	10	10
84	10	10
85	10	10
86	10	10
87	10	10
88	10	10
89	10	10
90	10	10
91	10	10
92	10	10
93	10	10
94	10	10
95	10	10
96	10	10
97	10	10
98	10	10
99	10	10
100	10	10

N/A
N/A
686

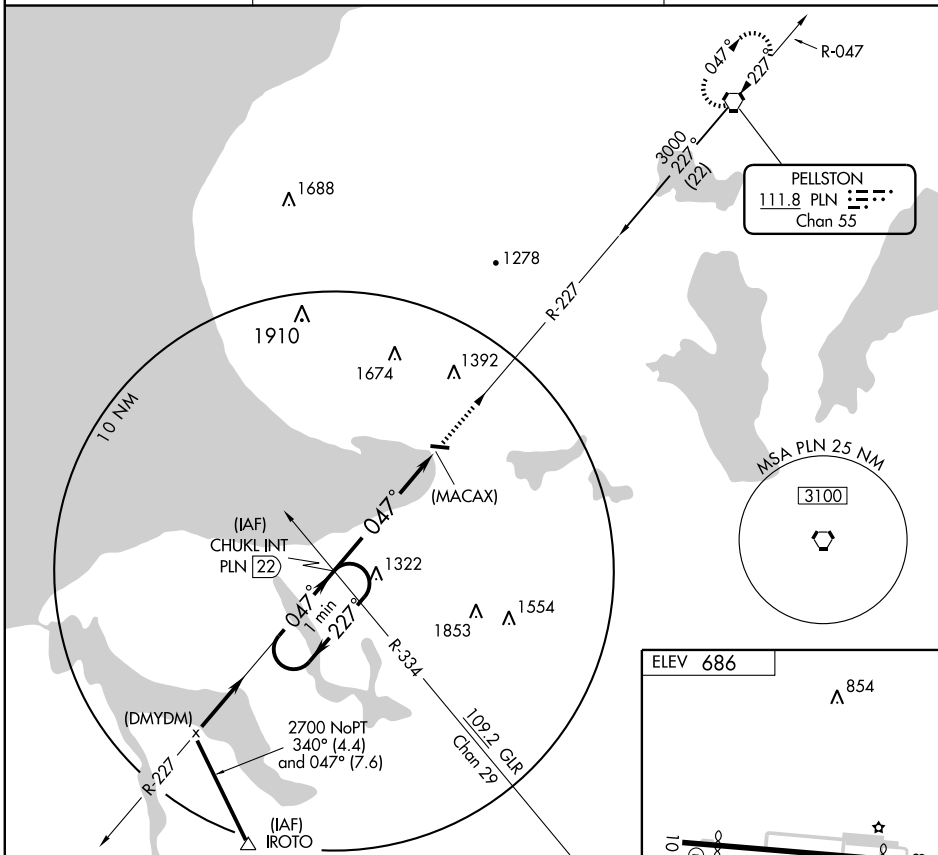
VOR or GPS-A

	Use Pellston altimeter setting.
 NA	Procedure not authorized at night.

MISSED APPROACH: Climb to 3000 direct PLN VORTAC and hold.

AWOS-3
119.925

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.8 (CTAF) **L**

One Minute Holding Pattern

CHUKL INT
PLN 22)

300

PLN

111.8

(MACAX)

PLN
16.4

047° 5.6 NM
from FAF

MIRL Rwy 10-28 **L**★

CATEGORY	A	B	C	D
CIRCLING	1660-1¼ 968 (1000-1¼)	1660-1½ 968 (1000-1½)	NA	

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

HARBOR SPRINGS, MICHIGAN

Amdt 1A 10154

HARBOR SPRINGS (MGN)

VOR or GPS-A

45°26'N - 84°55'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

HASTINGS (9D9) 3 W UTC-5(-4DT) N42°39.81' W85°20.78'

CHICAGO

801 B FUEL 100LL TPA-1601(800) NOTAM FILE LAN

L-281

RWY 12-30: H3900X75 (ASPH) S-20 MIRL

IAP

RWY 12: REIL. PAPI(P4R)—GA 4.0°. TCH 25'. Trees.

RWY 30: REIL. PAPI(P4L)—GA 4.0° TCH 25'. Tree.

RWY 09-27: 2400X170 (TURF)

RWY 09: Thld displcd 185'. Trees.

RWY 27: Thld displcd 393'. Trees.

RWY 18-36: 1962X200 (TURF)

RWY 18: Trees.

RWY 36: Tree.

AIRPORT REMARKS: Attended irregularly. Birds on and invof arpt.

ACTIVATE MIRL Rwy 12-30; REILS Rwy 12 and Rwy 30 and PAPI

Rwy 12 and Rwy 30—CTAF. Rwy 09-27 and Rwy 18-36 marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 123.075.

Ⓡ GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z±)

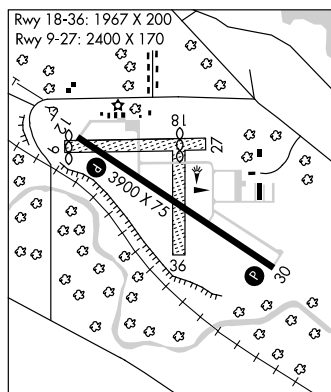
Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W 85°29.82' 142° 10 NM to fld.

803/4W. DME unmonitored.

**HAT FIELD** (See NUNICA)**HESEL****ALBERT J. LINDBERG** (5Y1) 2 N UTC-5(-4DT) N46°02.15' W84°25.19'

LAKE HURON

760 B NOTAM FILE GRB

L-31B

RWY 09-27: H3700X60 (ASPH) MIRL

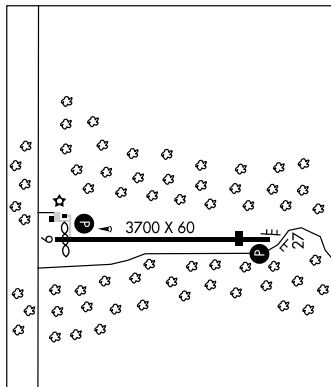
RWY 09: PAPI(P2L)—GA 4.0° TCH 40'. Thld displcd 200'. Trees.

RWY 27: PAPI(P2L)—3.5° TCH 25'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1400-2200Z±. Arpt manager after hour 1-906-298-0566. ACTIVATE MIRL Rwy 09-27 and PAPI Rws 09 and 27—CTAF.**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 029° 26.4 NM to fld. 840/6W. HIWAS.

**HIGHLAND****PONDEROSA HELIPORT** (13D) 2W UTC-5(4DT) N42°37.75' W83°40.99'

DETROIT

1017 NOTAM FILE LAN

COPTER

HELIPAD H1: H18X18(CONC)

HELIPORT REMARKS: Unattended. Helipad H1 perimeter lgts. ACTIVATE H1 perimeter lgts and VASI-123.025.**COMMUNICATIONS:** CTAF 122.9

VOR/DME GRR
115.95
Chan **106 (Y)**

APP CRS
142°

Rwy Idg
TDZE
Apt Elev
3900
797
801

VOR RWY 12
HASTINGS (9D9)

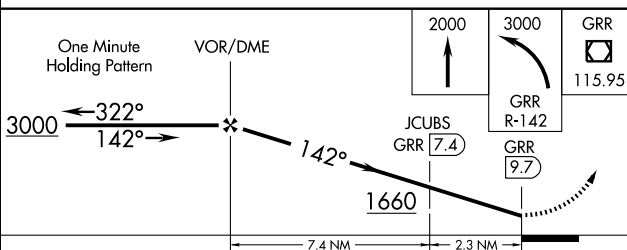
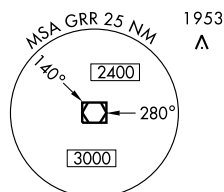
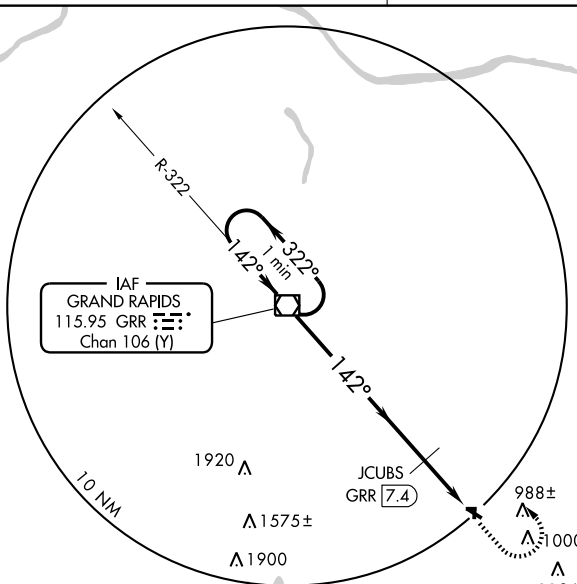


Use Grand Rapids altimeter setting.

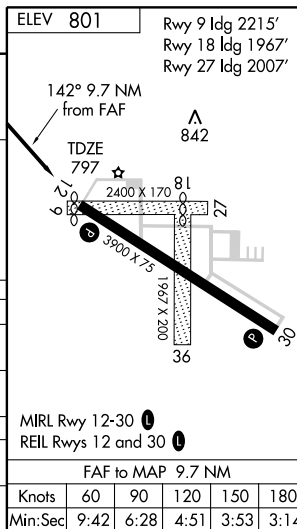
MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 via GRR R-142 to GRR VOR/DME and hold.

GRAND RAPIDS APP CON*
128.4 257.6

UNICOM
123.075 (CTAF) 0



CATEGORY	A	B	C	D
S-12	1660-1 863 (900-1)	1660-1¼ 863 (900-1¼)	1660-2½ 863 (900-2½)	NA
CIRCLING	1660-1 859 (900-1)	1660-1¼ 859 (900-1¼)	1660-2½ 859 (900-2½)	NA
JCUBS DME MINIMUMS				
S-12	1340-1 543 (600-1)	1340-1½ 543 (600-1½)	NA	
CIRCLING	1340-1 539 (600-1)	1340-1½ 539 (600-1½)	NA	



MRL Rwy 12-30 0
REIL Rwy 12 and 30 0

FAF to MAP 9.7 NM

Knots	60	90	120	150	180
Min:Sec	9:42	6:28	4:51	3:53	3:14

HILLMAN (Y95) 2 NW UTC-5(-4DT) N45°04.98' W83°56.04'

LAKE HURON

850 NOTAM FILE LAN

L-31C

RWY 04-22: H3400X60 (ASPH) MIRL

RWY 04: Trees. RWY 22: Thld dsplcd 760'. Trees.

RWY 18-36: 2800X150 (TURF)

RWY 18: Thld dsplcd 1400'. Trees. RWY 36: Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 18-36 surface rough and moderately rolling, not mowed. Snow removal second priority, confirm arpt condition before arrival. Rwy 18-36 marked with 3' yellow cones. ACTIVATE MIRL Rwy 04-22—CTAF.

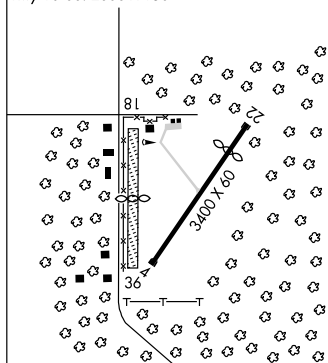
COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'

W83°33.42' 277° 16.0 NM to fld. 677/7W. HIWAS.

Rwy 18-36: 2800 X 150



HILLSDALE MUNI (JYM) 3 E UTC-5(-4DT) N41°55.28' W84°35.15'

DETROIT

1182 B S4 FUEL 100LL, JET A NOTAM FILE JYM

L-28J

RWY 10-28: H4000X75 (ASPH) S-16 MIRL 0.5% up E

IAP

RWY 10: Tree.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Trees.

AIRPORT REMARKS: Attended Nov-Mar 1300-2300Z†, Apr-Oct 1300-0200Z†. Rwy 28 PAPI OTS indef.

WEATHER DATA SOURCES: AWOS-3 121.025 (517) 437-5638.

COMMUNICATIONS: CTAF/UNICOM 122.8

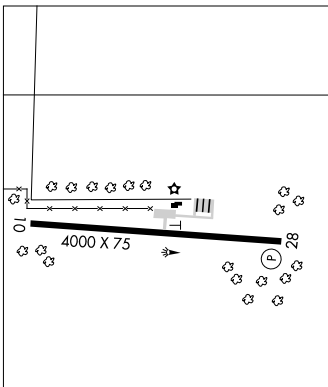
LITCHFIELD RCO 122.1R, 111.2T (LANSING RADIO)

® TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATIONS: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75'

W84°45.91' 141° 11.7 NM to fld. 1040/05W.



HIRAM CURE (See SUNFIELD)

HOFFMAN'S BLACK MOUNTAIN AERODROME (See Cheboygan)

HOLLAND N42°47.79' W86°09.45'. NOTAM FILE LAN.

CHICAGO

NDB (MHW) 233 HLM at Park Township. NDB unusable byd 5.5 NM.

L-28

VOR/DME LFD 111.2 Chan 49	APP CRS 141°	Rwy Ldg TDZE Apt Elev	N/A N/A 1182
---	------------------------	-----------------------------	---

VOR or GPS-A

HILLSDALE MUNI (JYM)

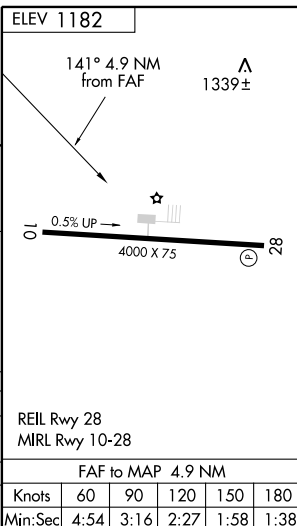
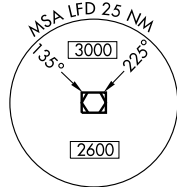
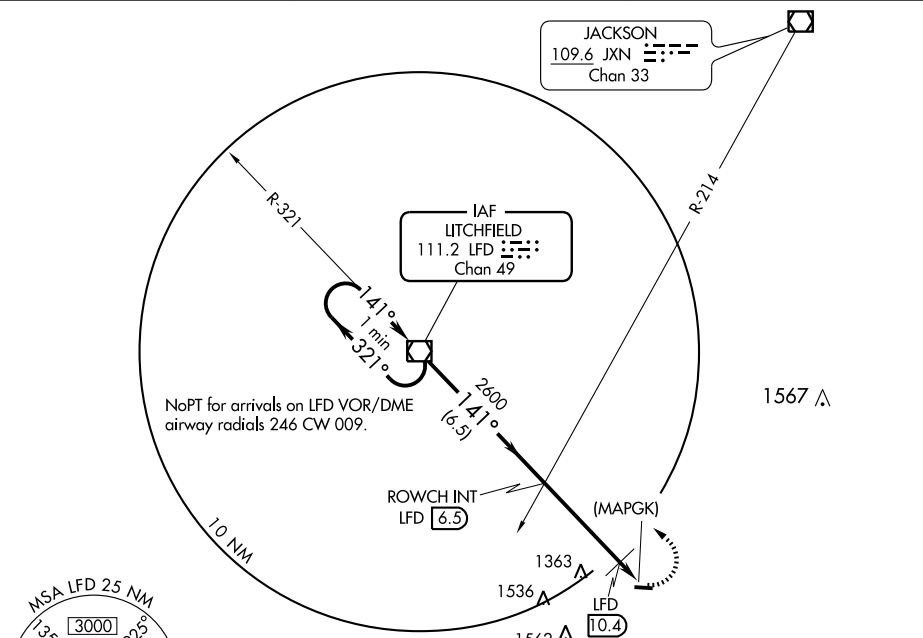


MISSED APPROACH: Climbing left turn to 2600 direct LFD VOR/DME and hold.

AWOS-3
121.025

TOLEDO APP CON
134.35 317.55

UNICOM
122.8 (CTAF)



One Minute Holding Pattern		VOR/DME		ROWCH INT LFD 6.5		2600	LFD 111.2
2600		321°		141°		2600	1720
		6.5 NM		3.9 NM		1 NM	
CATEGORY	A	B	C	D			
CIRCLING	1720-1	538 (600-1)	1720-1½ 538 (600-1½)	NA			
DME MINIMUMS							
CIRCLING	1640-1	458 (500-1)	1640-1½ 458 (500-1½)	NA			

HOLLAND

PARK TOWNSHIP (HLM) 3 NW UTC-5(-4DT) N42°47.76' W86°09.72'

CHICAGO

603 B FUEL 100LL TPA-1403(800) NOTAM FILE LAN

RWY 05-23: H2999X50 (ASPH) MIRL (NSTD)

RWY 05: Thld dsplcd 725'. Road.

RWY 23: Thld dsplcd 1142'. Trees.

RWY 12-30: 2245X90 (TURF)

RWY 12: Thld dsplcd 1019'. Trees.

RWY 30: Thld dsplcd 820'. Trees.

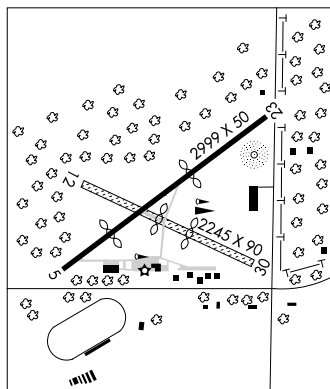
AIRPORT REMARKS: Attended irregularly. Rwy 12-30 CLOSED Nov 1 thru Mar 31 and when snow covered. Departure procedure: Rws 05 and 23 climb straight-out to 1200' MSL before turning. Rwy 12-30 and dsplcd thlds marked with 3' yellow cones. **ACTIVATE** NSTD MIRL Rwy 05-23—CTAF. Rwy 05-23 NSTD MIRL; lgts 24' from rwy edge.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

RADIO AIDS TO NAVIGATION

HOLLAND NDB 233 HLM N42°47.79' W86°09.45' at fld.



TULIP CITY (BIV) 2 S UTC-5(-4DT) N42°44.57' W86°06.47'

CHICAGO

698 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE BIV

RWY 08-26: H6002X100 (ASPH-GRVD) S-75, D-160, 2D-175 HIRL

RWY 08: REIL. PAPI (P4L)—GA 3.0° TCH 40'. Rgt tfc.

RWY 26: REIL. MALSR. PAPI (P4L)—GA 3.0° TCH 33'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1100-0300Z†, Sat and Sun 1200-0200Z†. For arpt attendant other hrs and during emerg call 616-392-7831. Deer and birds on and invof arpt. Ldg fee. Ldg fee waived with minimum fuel purchase. HIRL Rwy 08-26 preselect low ints; to increase inst and **ACTIVATE** MALSR Rwy 26; REIL Rwy 08; PAPI Rwy 08 and Rwy 26—CTAF.

WEATHER DATA SOURCES: ASOS 119.025 (616) 394-0190

COMMUNICATIONS: CTAF/UNICOM 123.05

PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)

Ⓡ **MUSKEGON APP/DEP CON 119.8** (1100-0400Z†)

MUSKEGON CLNC DEL 123.95

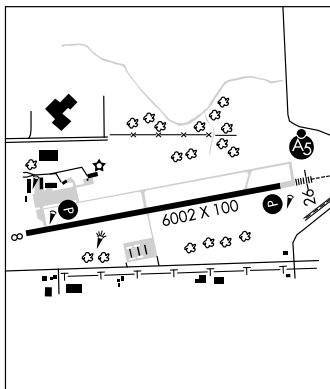
Ⓡ **CHICAGO CENTER APP/DEP CON 128.5** (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 360° 16.6 NM to fld. 640/00E.

ILS/DME 110.55 I-BIV Chan 42Y Rwy 26.



HOME ACRES SKY RANCH (See LAKE CITY)

HONEY ACRES (See CLINTON)

HOUGHTON CO MEM (See HANCOCK)

HOUGHTON LAKE HEIGHTS

HOUGHTON LAKE STATE (5Y2) 1 W UTC-5(-4DT) N44°19.75' W84°47.50'

LAKE HURON

1165 NOTAM FILE LAN

RWY 16-34: 2750X104 (TURF)

RWY 16: Thld dsplcd 550'. Brush.

RWY 34: Thld dsplcd 900'. Trees.

AIRPORT REMARKS: Attended irregularly. Snow removal irregular—confirm condition with arpt manager on 616-540-1324. Rwy 16 has 35' p-line on centerline 315' from thld. Rwy 16-24 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

HOUGHTON LAKE N44°21.53' W84°39.94' NOTAM FILE HTL.

LAKE HURON

(T) **VOR/DME 111.6** HTL Chan 53 at Roscommon Co-Blodgett Meml. 1145/5W. ASOS.

L-31C

VOR/DME unmonitored dusk to 1300Z†.

LOC/DME I-BIV 110.55 Chan 42 (Y)	APP CRS 264°	Rwy Idg TDZE Apt Elev	6002 686 698
--	------------------------	-----------------------------	---

ILS or LOC/DME RWY 26

HOLLAND/ TULIP CITY (BIV)

NA For inoperative MALSRR, increase all S-ILS 26 visibility to 1. When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 71 feet, all MDA 80 feet and S-ILS 26 Cats visibility ¼ mile, and S-LOC 26 Cat C visibility ¼ mile. For inoperative MALSRR when using Muskegon altimeter setting, increase S-ILS 26 all Cats visibility to 1¼. VDP NA when using Muskegon altimeter setting.



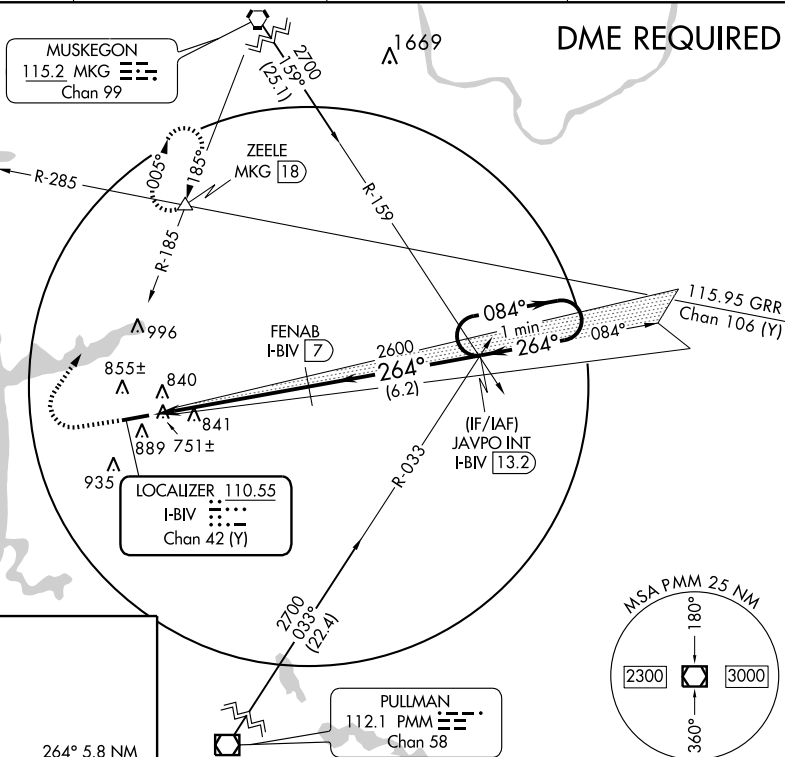
MISSED APPROACH: Climb to 2000 then climbing right turn to 2600 via heading 080° and MKG R-185 to ZEELE INT/ MKG 18 DME and hold.

ASOS
119.025

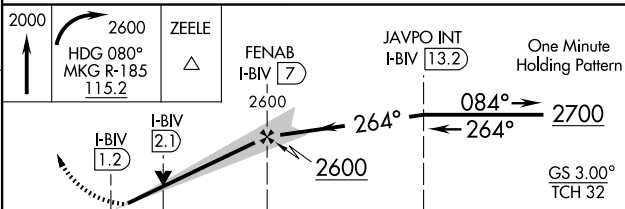
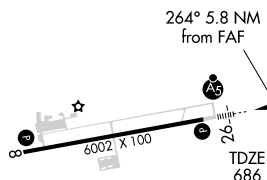
MUSKEGON APP CON ★
119.8 339.1

MUSKEGON CLNC DEL
123.95

UNICOM
123.05 (CTAF) 0



ELEV 698



CATEGORY	A	B	C	D
S-ILS 26		936-1½	250 (300-½)	NA
S-LOC 26		1020-½	334 (400-½)	NA
CIRCLING	1200-1	502 (600-1)	1200-1½ 502 (600-1½)	NA

REIL Rwy 8 and 26 0
HIRL Rwy 8-26 0

HOLLAND, MICHIGAN
Amdt 2 09239

42°45'N - 86°06'W

HOLLAND/ TULIP CITY (BIV)

ILS or LOC/DME RWY 26

APP CRS	Rwy Idg	6002
084°	TDZE	698
	Apt Elev	698

RNAV (GPS) RWY 8

HOLLAND/ TULIP CITY (BIV)

▼ Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.
▲ If local altimeter setting not received, use Muskegon County altimeter setting and increase all MDAs 80 feet.

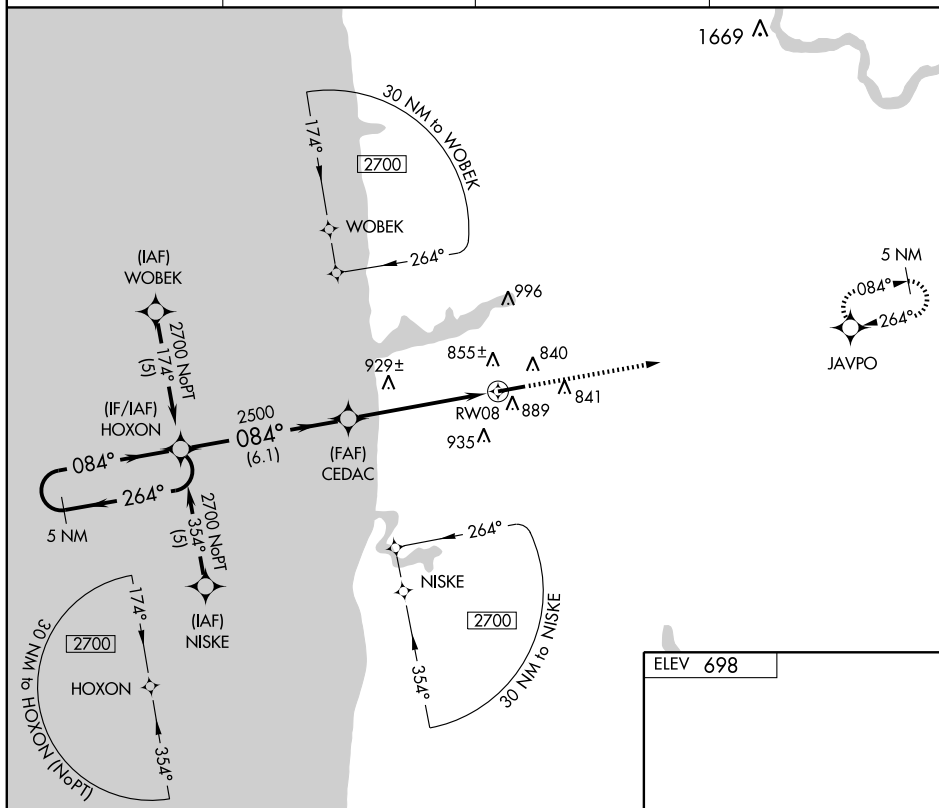
MISSED APPROACH: Climb to 3000 direct JAVPO and hold.

ASOS
119.025

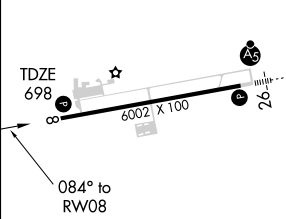
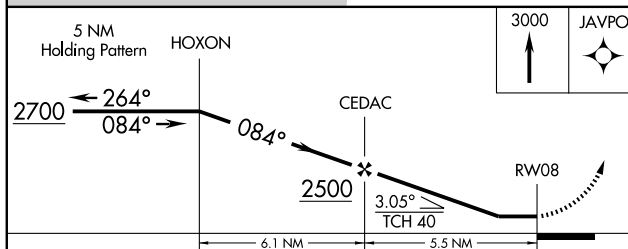
MUSKEGON APP CON ★
119.8 339.1

MUSKEGON CLNC DEL
123.95

UNICOM
123.05 (CTAF) 0



ELEV 698



CATEGORY	A	B	C	D
LNAV MDA	1180-1	482 (500-1)	1180-1½ 482 (500-1½)	1180-1½ 482 (500-1½)
CIRCLING	1200-1	502 (600-1)	1200-1½ 502 (600-1½)	1260-2 562 (600-2)

REIL Rwy 8 and 26 **0**
 HIRL Rwy 8-26 **0**

WAAS CH 53402 W26A	APP CRS 264°	Rwy Idg TDZE Apt Elev	6002 686 698
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 26

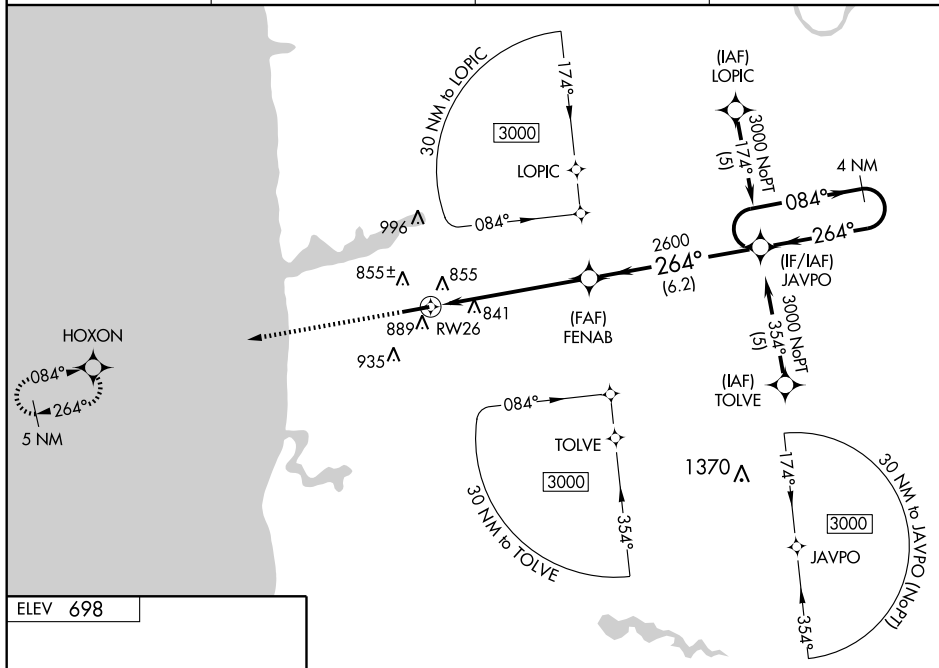
HOLLAND/ TULIP CITY (BIV)

▼ For inoperative MALSR, increase LPV all Cats visibility to 1. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Muskegon altimeter setting. When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 71 feet and all MDA 80 feet; increase all LPV, LNAV-VNAV and LNAV Cat C visibility ¼ mile. For inoperative MALSR, when using Muskegon altimeter setting, increase LPV all Cats visibility to 1¼.

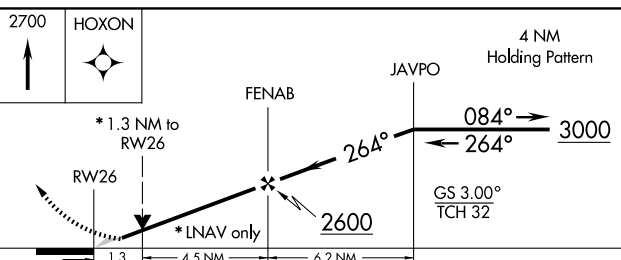
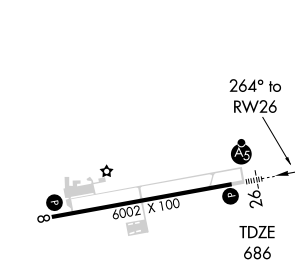


MISSED APPROACH:
Climb to 2700 direct
HOXON and hold.

ASOS 119,025	MUSKEGON APP CON * 119.8 339.1	MUSKEGON CLNC DEL 123.95	UNICOM 123.05 (CTAF) 0
------------------------	--	------------------------------------	----------------------------------



ELEV 698



CATEGORY	A	B	C	D
LPV DA	951-1½	265 (300-1½)		NA
LNAV/VNAV DA	1175-1¼	489 (500-1¼)		NA
LNAV MDA	1140-1½	454 (500-1½)	1140-¾ 454 (500-¾)	NA
CIRCLING	1200-1	502 (600-1)	1200-1½ 502 (600-1½)	NA

REIL Rwy 8 and 26 0
HIRL Rwy 8-26 0

HOLLAND, MICHIGAN

Amdt 3 09239

HOLLAND/ TULIP CITY (BIV)

42°45'N - 86°06'W

RNAV (GPS) RWY 26

VOR/DME PMM 112.1 Chan 58	APP CRS 360°	Rwy Idg TDZE Apt Elev 688	N/A N/A
---	------------------------	---	--------------------------

VOR-A
HOLLAND/ TULIP CITY (BIV)

T
A NA

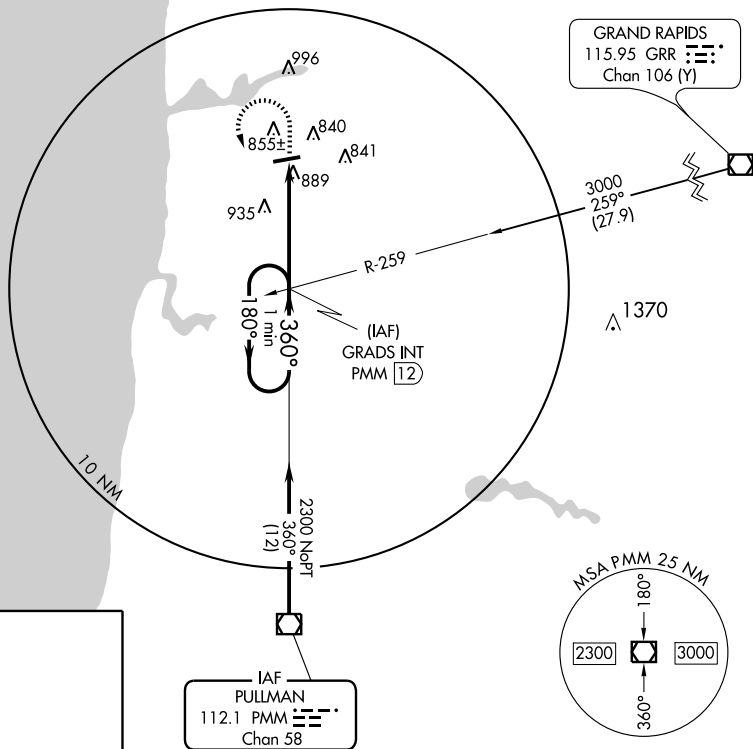
MISSED APPROACH: Climb to 2300 then left turn via PMM R-360 to GRADS INT/PMM 12 DME and hold.

ASOS
119.025

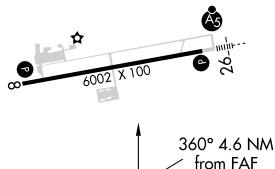
MUSKEGON APP CON★
119.8 339.1

MUSKEGON CLNC DEL
123.95

UNICOM
123.05 (CTAF) **L**



ELEV 688



REIL Rwy 8 and 26 **L**
HIRL Rwy 8-26 **L**

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

HOLLAND, MICHIGAN
Amdt 10C 09239

HOLLAND/TULIP CITY (BIV)

VOR-A

42°45'N - 86°06'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

HOUGHTON LAKE

ROSCOMMON CO—BLODGETT MEML (HTL) 5 NE UTC-5(-4DT) N44°21.59' W84°40.27'

LAKE HURON

1150 B S4 FUEL 100LL, JET A NOTAM FILE HTL

L-31C

RWY 09-27: H4000X75 (ASPH) S-24 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.5° TCH 32'. Trees.

RWY 18-36: 2200X100 (TURF)

RWY 18: Thld displcd 200'. Trees.

RWY 36: Thld displcd 200'. Trees.

AIRPORT REMARKS: Attended 1300-2230Z†. Arpt unattended Christmas and Thanksgiving. Rwy 18-36 CLOSED when snow covered except for ski-equipped acft. Animals on and invof arpt. Rwy 18-36 marked with 3' yellow cones. HIRL Rwy 09-27 preset on low ints dusk-0200Z†; after 0200Z† ACTIVATE—CTAF. To increase ints and ACTIVATE REIL and PAPI Rwy 09 and 27—CTAF. 2203' MSL (883' AGL) twr 4.2 NM southwest of arpt.

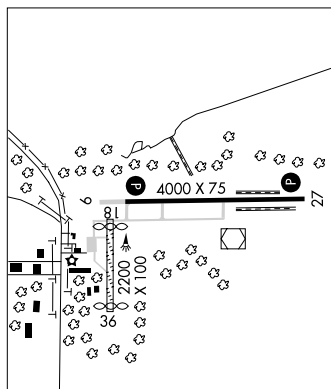
WEATHER DATA SOURCES: ASOS 111.6 HTL (989) 366-4825.**COMMUNICATIONS:** CTAF/UNICOM 122.8

WEST BRANCH RCO 122.35 (LANSING RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 132.9

RADIO AIDS TO NAVIGATION: NOTAM FILE HTL.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53' W84°39.94' at fld. 1145/5W. ASOS.



HOUGHTON LAKE STATE (See HOUGHTON LAKE HEIGHTS)

HOWARD NIXON MEML (See CHESANING)

HOWELL N42°38.03' W83°59.26'. NOTAM FILE OZW.

DETROIT

NDB (MHW) 243 OZW at Livingston Co Spencer J. Hardy.

L-28J

HOWELL

AERONUT PARK BALLOON (13M) 4 E UTC-5(-4DT) N42°36.25' W83°51.52'

DETROIT

980 NOTAM FILE LAN

Not insp.

RWY B1: 900X250 (TURF)

AIRPORT REMARKS: Attended irregularly. Contact owner at 517-552-1236 when using for first time. Acft in the vicinity using Rwy 09-27 adjacent to the S at McKenzie's Landing (1MI5). No snow removal. Support vehicles be alert when driving on grass in spring and fall when wet due to possible soft areas.

COMMUNICATIONS: CTAF 122.9

LIVINGSTON CO SPENCER J. HARDY (OZW) 3 NW UTC-5(-4DT) N42°37.77' W83°58.93'

DETROIT

962 B S4 FUEL 100LL, JET A TPA-2001(1039) NOTAM FILE OZW

COPTER

RWY 13-31: H5002X100 (CONC-GRVD) S-100 HIRL 0.4% up NW

H-106, L-28J

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Trees.

IAP

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z†, Sat-Sun 1300-0100Z†. For fuel after hrs phone 517-548-4945. Deer and birds on and invof arpt. Rwy 13 PAPI OTS indef. HIRL Rwy 13-31 ops low ints dusk-0300Z†; to increase ints and ACTIVATE after 0300Z†—CTAF. ACTIVATE REIL Rwy 31 and MALSR Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 ops dawn-dusk, thereafter—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.875 (517) 546-4450.**COMMUNICATIONS:** CTAF/UNICOM 123.0

® DETROIT APP/DEP CON 127.5 CLNC DEL 121.725

GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

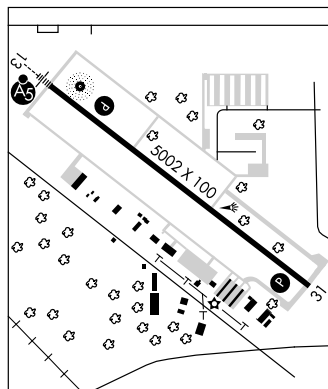
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53' W83°35.65' 311° 21.7 NM to fld. 950/3W.

HOWELL NDB (MHW) 243 OZW N42°38.03' W83°59.26' at fld. NOTAM FILE OZW.

ILS/DME 108.55 I-OGO Chan 22Y Rwy 13. ILS/DME unmonitored.

COMM/NAV/WEATHER REMARKS: For CLNC DEL key frequency 121.725 4 times. To contact FSS key frequency 121.725 6 times; one second on/one second off; monitor 121.725 while electronic equipment dials Detroit CLNC DEL/Lansing FSS.



APP CRS **094°**
Rwy Idg **4000**
TDZE **1150**
Apt Elev **1150**

RNAV (GPS) RWY 9

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)



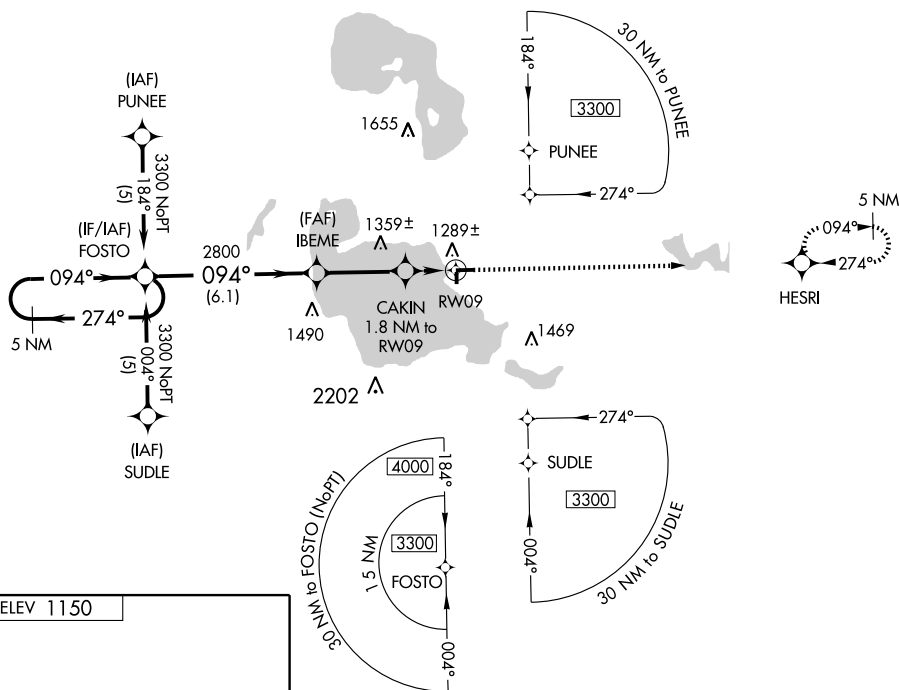
DME/DME RNP-0.3 NA. Circling NA at night.
Visibility reduction by helicopters NA.
If local altimeter setting not received, use Gaylord
altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climb to 3300 direct HESRI and hold.

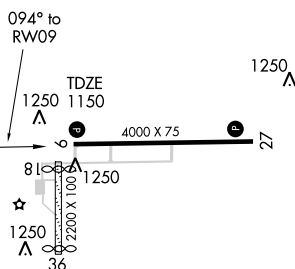
ASOS
111.6

MINNEAPOLIS CENTER
132.9 398.9

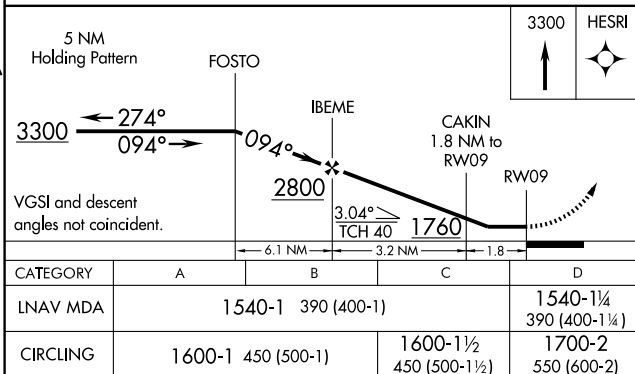
UNICOM
122.8 (CTAF) 0



ELEV 1150



HIRL Rwy 9-27 0
REIL Rws 9 and 27 0



APP CRS **274°**
 Rwy Idg **4000**
 TDZE **1145**
 Apt Elev **1150**

HOUGHTON LAKE/

ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

RNAV (GPS) RWY 27

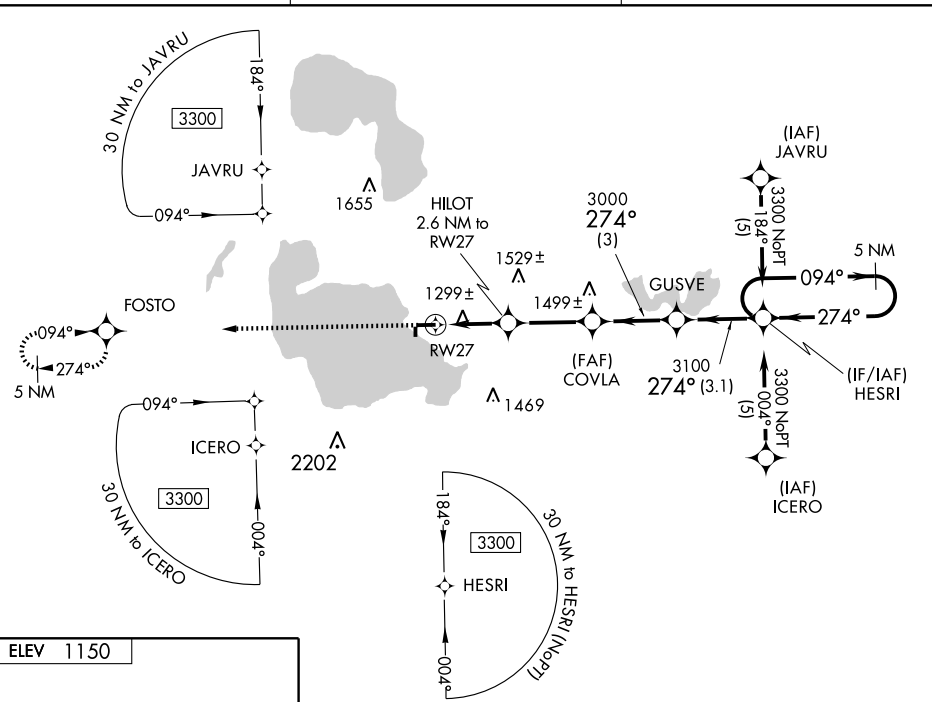
DME/DME RNP-0.3 NA. Circling NA at night.
 Visibility reduction by helicopters NA.
 If local altimeter setting not received, use Gaylord
 altimeter setting and increase all MDAs 120 feet.

MISSED APPROACH: Climb to 3300 direct FOSTO and hold.

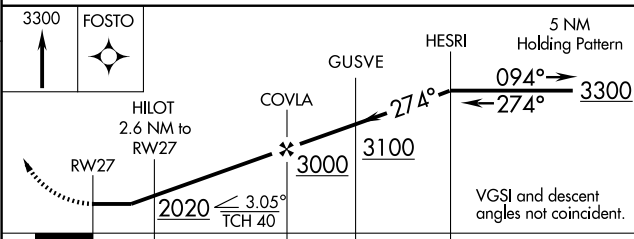
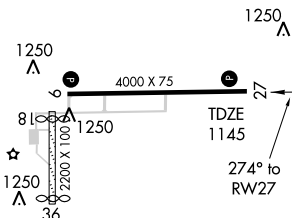
ASOS
111.6

MINNEAPOLIS CENTER
132.9 398.9

UNICOM
122.8 (CTAF) 0



ELEV 1150



CATEGORY	A	B	C	D
LNAV MDA	1560-1	415 (500-1)	1560-1¼	415 (500-1¼)
CIRCLING	1600-1	450 (500-1)	1600-1½ 450 (500-1½)	1700-2 550 (600-2)

HIRL Rwy 9-27 0
 REIL Rwy 9 and 27 0

HOUGHTON LAKE, MICHIGAN

Orig 09071

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

44°22'N - 84°40'W

RNAV (GPS) RWY 27

VOR/DME HTL
111.6
Chan **53**

APP CRS
103°

Rwy Idg
TDZE
Apt Elev
4000
1150
1150

HOUGHTON LAKE/
ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

VOR RWY 9

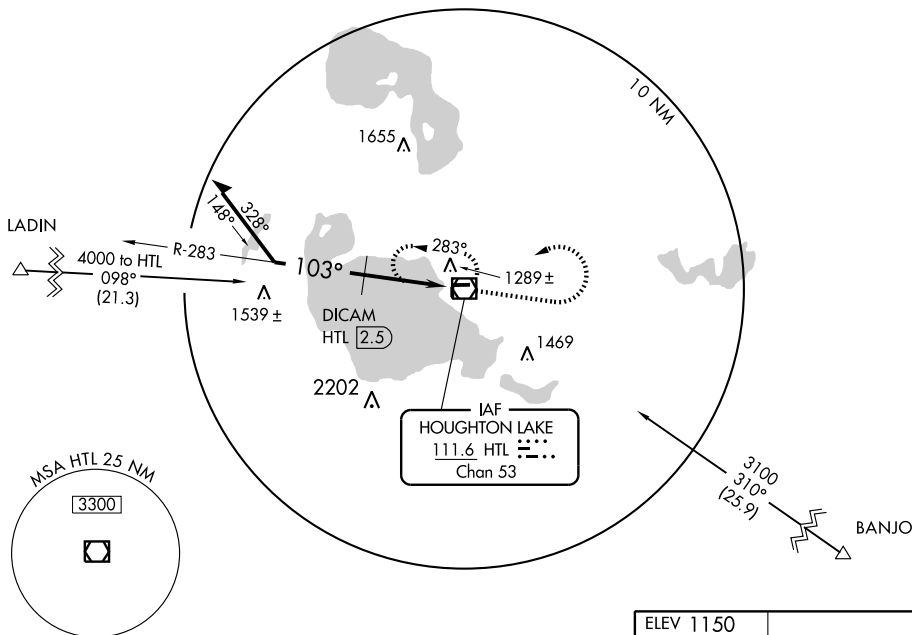
▼ If local altimeter setting not received, procedure NA.
▲ NA Visibility reduction by helicopters NA.
Circling NA at night.

MISSED APPROACH: Climb to 2000 then climbing
left turn to 3000 direct HTL VOR/DME and hold.

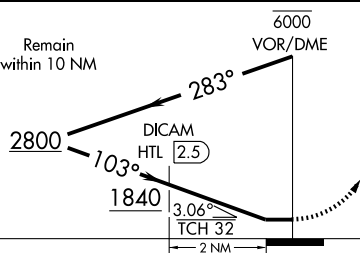
ASOS
111.6

MINNEAPOLIS CENTER
132.9 398.9

UNICOM
122.8 (CTAF) 0



Remain
within 10 NM

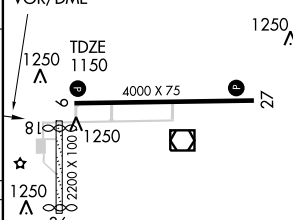


2000

3000

HTL
111.6

ELEV 1150
103° to
HTL
VOR/DME



CATEGORY	A	B	C	D
S-9	1840-1 690 (700-1)		1840-2 690 (700-2)	1840-2 1/4 690 (700-2 1/4)
CIRCLING	1840-1 690 (700-1)		1840-2 690 (700-2)	1840-2 1/4 690 (700-2 1/4)
DICAM FIX MINIMUMS (DME REQUIRED)				
S-9	1540-1 390 (400-1)			1540-1 1/4 390 (400-1 1/4)
CIRCLING	1600-1 450 (500-1)		1600-1 1/2 450 (500-1 1/2)	1700-2 550 (600-2)

HIRL Rwy 9-27 0
REIL Rwy 9 and 27 0

VOR/DME HTL
111.6
Chan **53**

APP CRS
262°

Rwy Idg
TDZE **1145**
Apt Elev **1150**

HOUGHTON LAKE/

ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

VOR RWY 27

NA

If local altimeter setting not received, procedure NA.
Visibility reduction by helicopters NA.
Circling NA at night.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct HTL VOR/DME and hold.

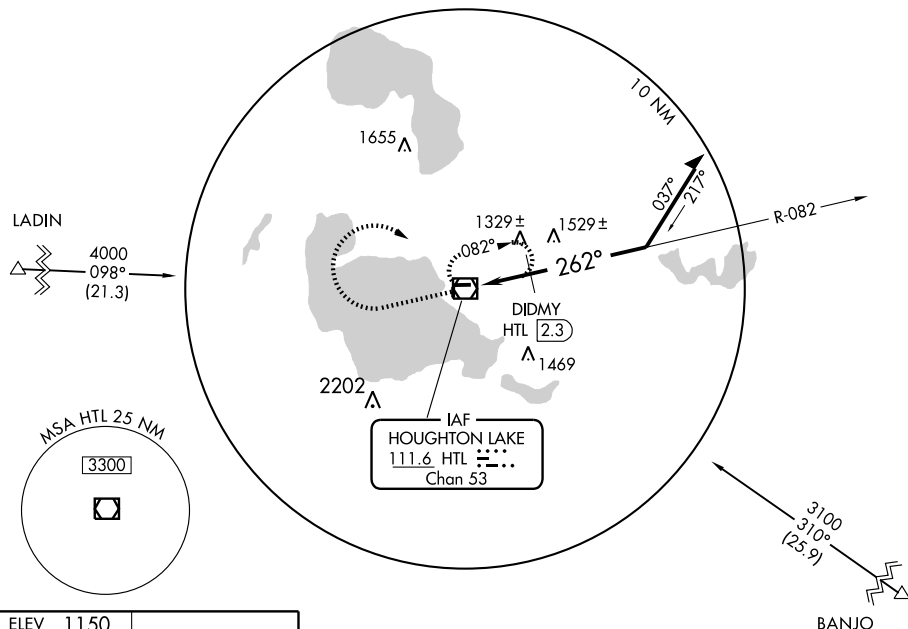
ASOS

111.6

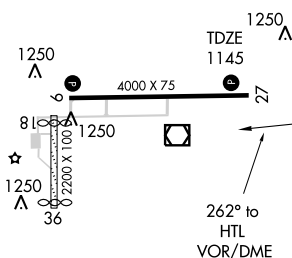
MINNEAPOLIS CENTER

132.9 398.9

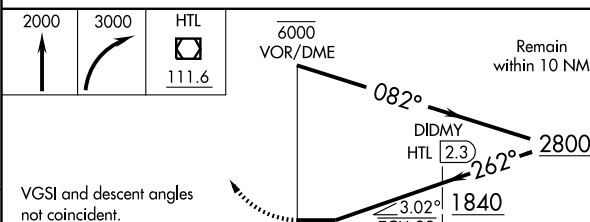
UNICOM

122.8 (CTAF) 0

ELEV 1150



HIRL Rwy 9-27 **0**
REIL Rws 9 and 27 **0**



CATEGORY	A	B	C	D
S-27	1840-1 695 (700-1)		1840-2 695 (700-2)	1840-2 1/4 695 (700-2 1/4)
CIRCLING	1840-1 690 (700-1)		1840-2 690 (700-2)	1840-2 1/4 690 (700-2 1/4)
DIDMY FIX MINIMUMS (DME REQUIRED)				
S-27	1580-1 435 (500-1)		1580-1 1/4 435 (500-1 1/4)	1580-1 1/2 435 (500-1 1/2)
CIRCLING	1600-1 450 (500-1)		1600-1 1/2 450 (500-1 1/2)	1700-2 550 (600-2)

HOUGHTON LAKE, MICHIGAN

Amdt 3 09071

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

44°22'N - 84°40'W

VOR RWY 27

HOUGHTON LAKE**ROSCOMMON CO—BLODGETT MEML** (HTL) 5 NE UTC-5(-4DT) N44°21.59' W84°40.27'

LAKE HURON

1150 B S4 FUEL 100LL, JET A NOTAM FILE HTL

L-31C

RWY 09-27: H4000X75 (ASPH) S-24 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.5° TCH 32'. Trees.

RWY 18-36: 2200X100 (TURF)

RWY 18: Thld displcd 200'. Trees.

RWY 36: Thld displcd 200'. Trees.

AIRPORT REMARKS: Attended 1300-2230Z†. Arpt unattended Christmas and Thanksgiving. Rwy 18-36 CLOSED when snow covered except for ski-equipped acft. Animals on and invof arpt. Rwy 18-36 marked with 3' yellow cones. HIRL Rwy 09-27 preset on low ints dusk-0200Z†; after 0200Z† ACTIVATE—CTAF. To increase ints and ACTIVATE REIL and PAPI Rwy 09 and 27—CTAF. 2203' MSL (883' AGL) twr 4.2 NM southwest of arpt.

WEATHER DATA SOURCES: ASOS 111.6 HTL (989) 366-4825.**COMMUNICATIONS:** CTAF/UNICOM 122.8

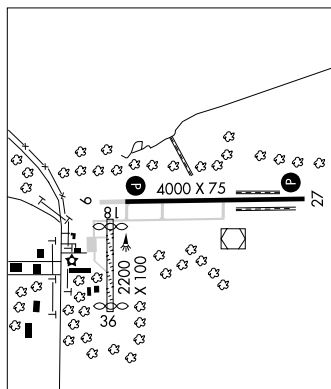
WEST BRANCH RCO 122.35 (LANSING RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 132.9

RADIO AIDS TO NAVIGATION: NOTAM FILE HTL.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53'

W84°39.94' at fld. 1145/5W. ASOS.

**HOUGHTON LAKE STATE** (See HOUGHTON LAKE HEIGHTS)**HOWARD NIXON MEML** (See CHESANING)**HOWELL** N42°38.03' W83°59.26'. NOTAM FILE OZW.

DETROIT

NDB (MHW) 243 OZW at Livingston Co Spencer J. Hardy.

L-28J

HOWELL**AERONUT PARK BALLOON** (13M) 4 E UTC-5(-4DT) N42°36.25' W83°51.52'

DETROIT

980 NOTAM FILE LAN

Not insp.

RWY B1: 900X250 (TURF)

AIRPORT REMARKS: Attended irregularly. Contact owner at 517-552-1236 when using for first time. Acft in the vicinity using Rwy 09-27 adjacent to the S at McKenzie's Landing (1M15). No snow removal. Support vehicles be alert when driving on grass in spring and fall when wet due to possible soft areas.

COMMUNICATIONS: CTAF 122.9**LIVINGSTON CO SPENCER J. HARDY** (OZW) 3 NW UTC-5(-4DT) N42°37.77' W83°58.93'

DETROIT

962 B S4 FUEL 100LL, JET A TPA-2001(1039) NOTAM FILE OZW

COPTER

RWY 13-31: H5002X100 (CONC-GRVD) S-100 HIRL 0.4% up NW

H-106, L-28J

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Trees.

IAP

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z†, Sat-Sun 1300-0100Z†. For fuel after hrs phone 517-548-4945. Deer and birds on and invof arpt. Rwy 13 PAPI OTS indef. HIRL Rwy 13-31 ops low ints dusk-0300Z†; to increase ints and ACTIVATE after 0300Z†—CTAF. ACTIVATE REIL Rwy 31 and MALSR Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 ops dawn-dusk, thereafter—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.875 (517) 546-4450.**COMMUNICATIONS:** CTAF/UNICOM 123.0

® DETROIT APP/DEP CON 127.5 CLNC DEL 121.725

GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

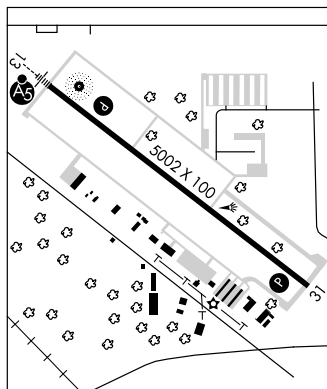
W83°35.65' 311° 21.7 NM to fld. 950/3W.

HOWELL NDB (MHW) 243 OZW N42°38.03' W83°59.26' at fld.

NOTAM FILE OZW.

ILS/DME 108.55 I-OGO Chan 22Y Rwy 13. ILS/DME unmonitored.

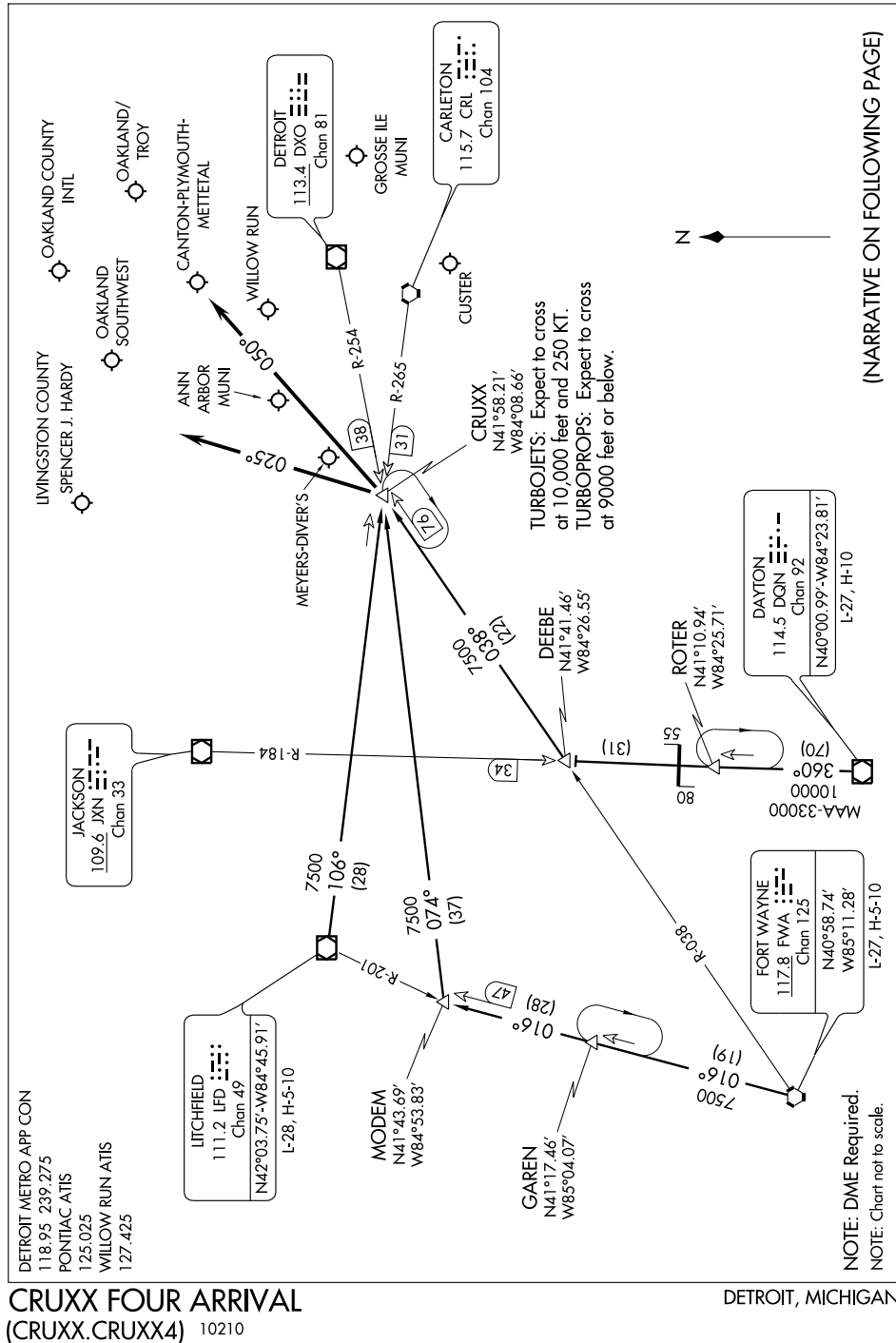
COMM/NAV/WEATHER REMARKS: For CLNC DEL key frequency 121.725 4 times. To contact FSS key frequency 121.725 6 times; one second on/one second off; monitor 121.725 while electronic equipment dials Detroit CLNC DEL/Lansing FSS.



CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LOC/DME I-OGO
108.55
 Chan **22(Y)**

APP CRS
132°

Rwy Idg **5002**
 TDZE **962**
 Apt Elev **962**

ILS or LOC RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)



NA

If local altimeter setting not received,
 use Bishop Intl altimeter setting and
 increase all DAs/MDAs 80 feet.

MALSR



MISSED APPROACH: Climb to 1600 then climbing
 right turn to 3000 via heading 356° and I-OGO NW
 course to HUCCY Int/I-OGO 13 DME and hold.

AWOS-3
118.875

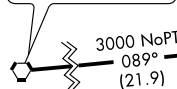
DETROIT APP CON
127.5 363.2

CLNC DEL
121.725 (GCO)

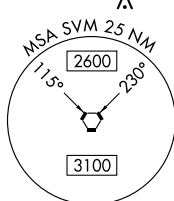
UNICOM
123.0 (CTAF) 0

Procedure NA for arrivals
 on LAN VORTAC airway
 radials 034 CW 115.

IAF
 LANSING
 110.8 LAN
 Chan 45

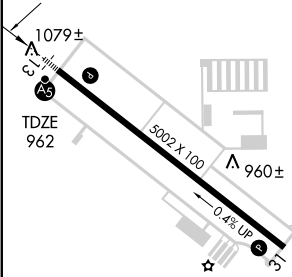


1923



ELEV 962

132° 5.8 NM
 from FAF



HIRL Rwy 13-31
 REIL Rwy 31

FAF to MAP 5.8 NM

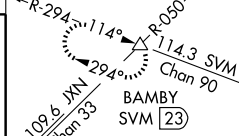
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

HOWELL, MICHIGAN
 Orig 10154

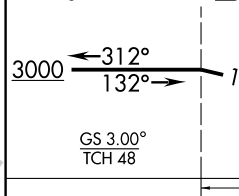
(IF/IAF)
 HUCCY INT
 I-OGO 13

DURGY INT
 I-OGO 6.8

ALTERNATE MISSED
 APCH FIX



One Minute
 Holding Pattern

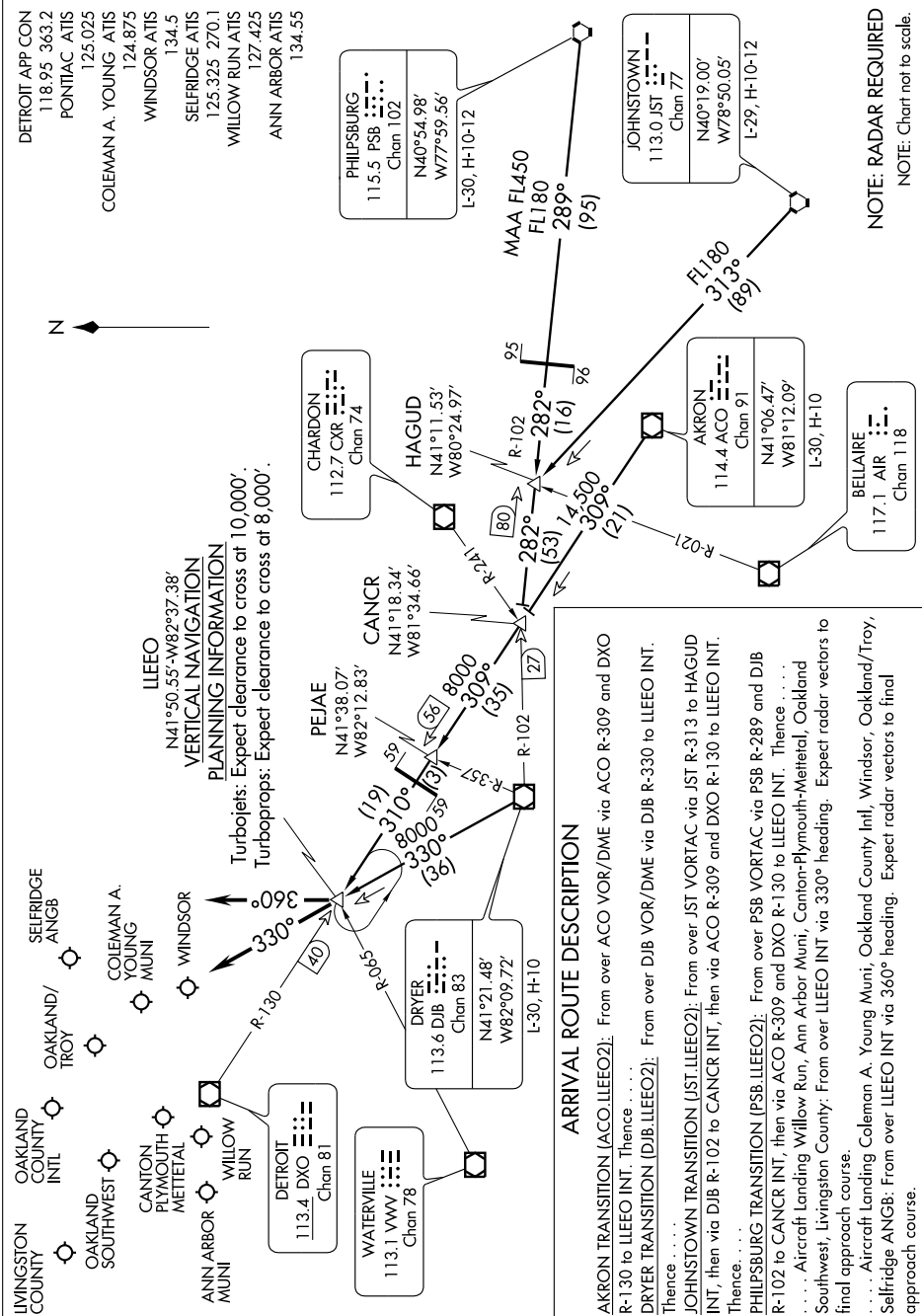


CATEGORY	A	B	C	D
S-ILS 13		1162-1/2	200 (200-1/2)	
S-LOC 13		1320-1/2	358 (400-1/2)	1320-3/4 358 (400-3/4)
CIRCLING	1460-1	498 (500-1)	1460-1/2 498 (500-1/2)	1520-2 558 (600-2)

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)
 42°38'N - 83°59'W

ILS or LOC RWY 13

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

NDB OZW 243	APP CRS 119°	Rwy Idg 5002 TDZE 962 Apt Elev 962
-----------------------	------------------------	---

NDB RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

▼ If local altimeter setting not received, use Bishop Intl altimeter setting and increase all MDAs 80 feet. Visibility reduction by helicopters NA. BRRGR FIX minimums NA when using Bishop Intl altimeter setting.

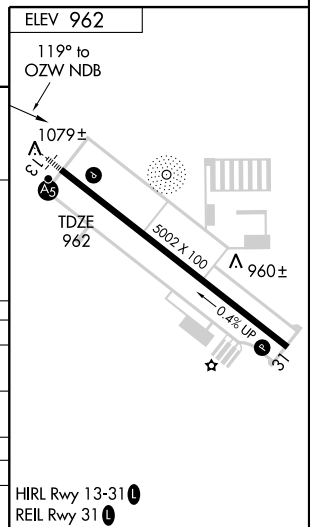
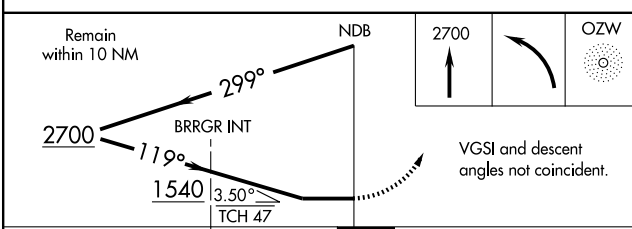
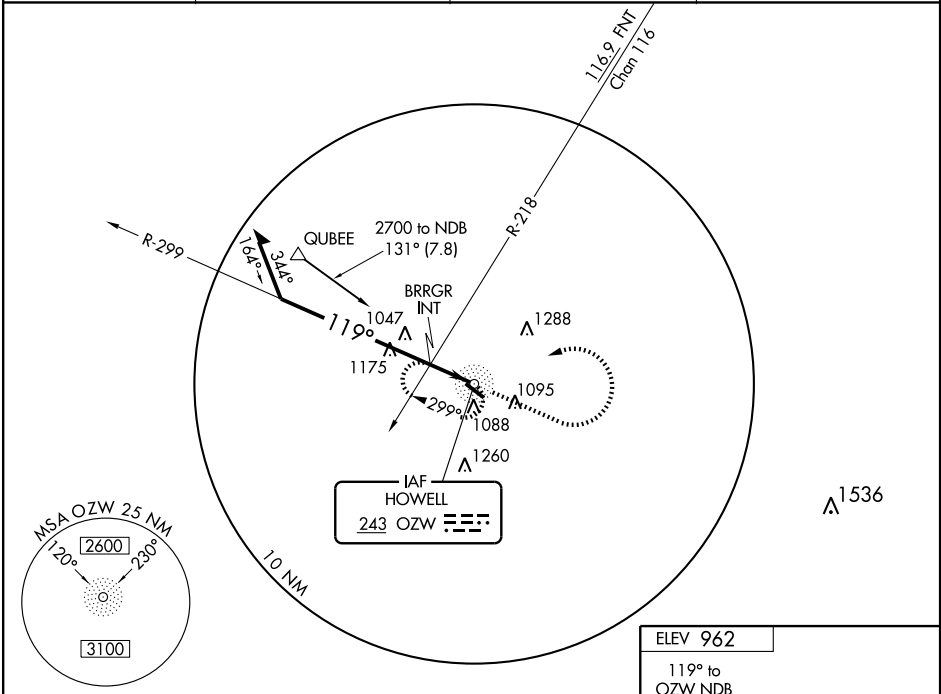
▲ NA

MALSR



MISSED APPROACH: Climb to 2700 then left turn direct OZW NDB and hold.

AWOS-3 118.875	DETROIT APP CON 127.5 363.2	CLNC DEL 121.725 (GCO)	UNICOM 123.0 (CTAF) 0
--------------------------	---------------------------------------	----------------------------------	---------------------------------



CATEGORY	A	B	C	D
S-13	1540-1	578 (600-1)	1540-1½ 578 (600-1½)	1540-1¾ 578 (600-1¾)
CIRCLING	1540-1	578 (600-1)	1540-1½ 578 (600-1½)	1540-2 578 (600-2)
BRRGR FIX MINIMUMS				
S-13	1380-1	418 (500-1)	1380-1¼	418 (500-1¼)
CIRCLING	1460-1	498 (500-1)	1460-1½ 498 (500-1½)	1520-2 558 (600-2)

HOWELL, MICHIGAN
Amdt 3 10154

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)
42°38'N - 83°59'W

NDB RWY 13

WAAS CH 69601 W13A	APP CRS 132°	Rwy Idg TDZE Apt Elev	5002 962
--	------------------------	-----------------------------	---------------------------

RNAV (GPS) RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

▼ DME/DME RNP-0.3 NA. If local altimeter setting not received, use Bishop Intl altimeter setting and increase all DAs/MDAs 80 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). Visibility reduction by helicopters NA. Baro-VNAV NA when using Bishop Intl altimeter setting.

MALSR



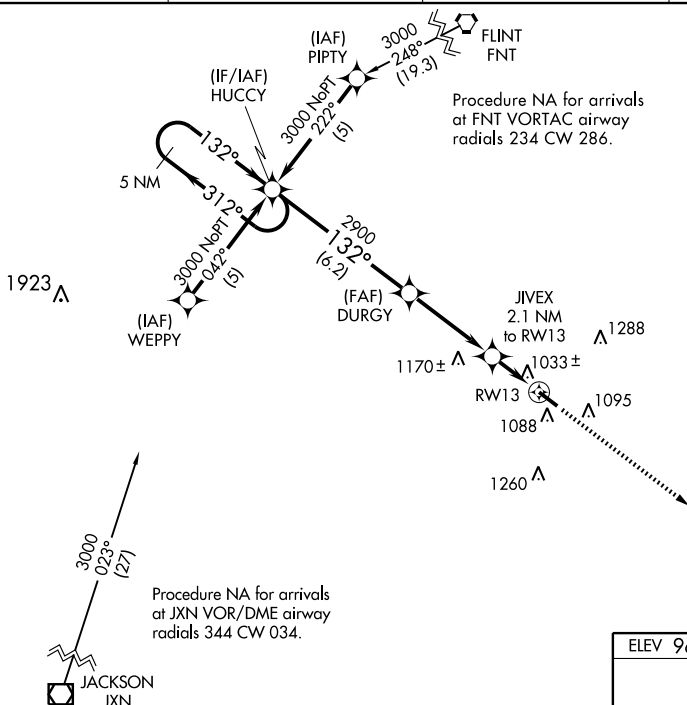
MISSED APPROACH:
Climb to 2800 direct BROVI and hold.

AWOS-3
118.875

DETROIT APP CON
127.5 363.2

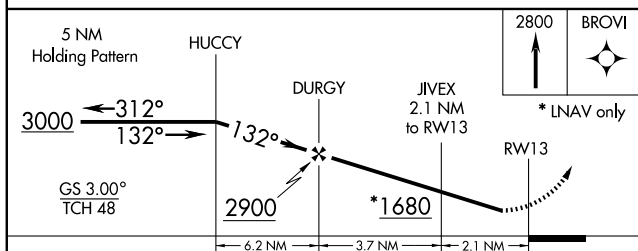
CLNC DEL
121.725 (GCO)

UNICOM
123.0 (CTAF) 0



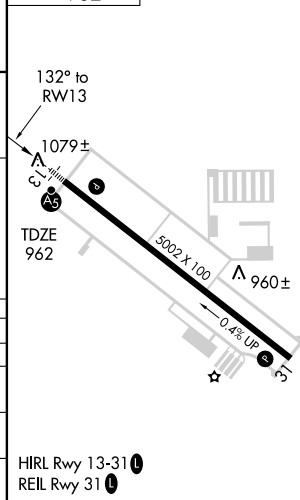
EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



CATEGORY	A	B	C	D
LPV DA		1244-1	282 (300-1)	
LNAV/VNAV DA		1324-1¼	362 (400-1¼)	
LNAV MDA		1300-1	338 (400-1)	
CIRCLING	1460-1¼	498 (500-1¼)	1460-1½ 498 (500-1½)	1520-2 558 (600-2)

ELEV 962



HIRL Rwy 13-31 **0**
REIL Rwy 31 **0**

HOWELL, MICHIGAN

Amdt 1 10154

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

42°38'N - 83°59'W

RNAV (GPS) RWY 13

APP CRS 312°	Rwy Idg TDZE Apt Elev	5002 943 962
------------------------	-----------------------------	---

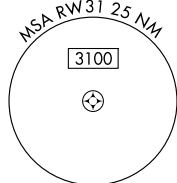
RNAV (GPS) RWY 31

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

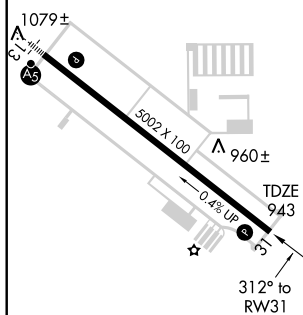
▼ DME/DME RNP-0.3 NA. If local altimeter setting not received, use Bishop Intl altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climb to 3000 direct HUCCY and hold.

AWOS-3 118.875	DETROIT APP CON 127.5 363.2	CLNC DEL 121.725 (GCO)	UNICOM 123.0 (CTAF) 1
--------------------------	---------------------------------------	----------------------------------	--

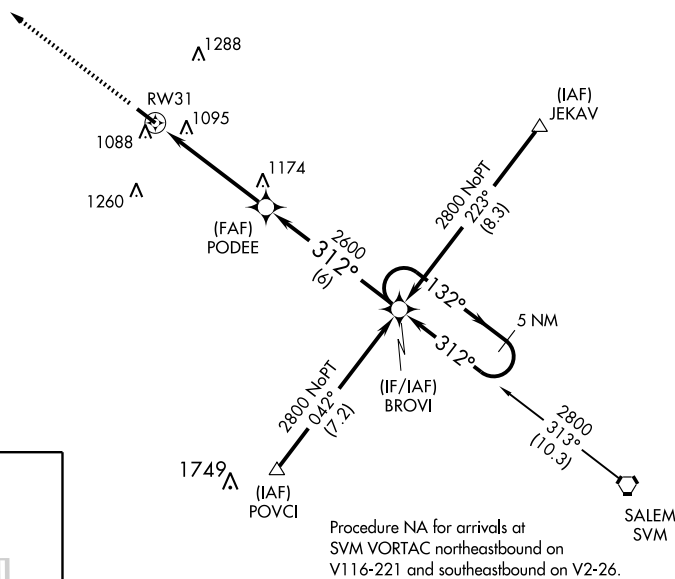


ELEV 962



HIRL Rwy 13-31 **1**
REIL Rwy 31 **1**

HOWELL, MICHIGAN
Orig 10154



CATEGORY	A		B		C		D	
	1400-1		457 (500-1)		1400-1¼ 457 (500-1¼)		1400-1½ 457 (500-1½)	
CIRCLING	1460-1		498 (500-1)		1460-1½ 498 (500-1½)		1520-2 558 (600-2)	

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)
42°38'N - 83°59'W

RNAV (GPS) RWY 31

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

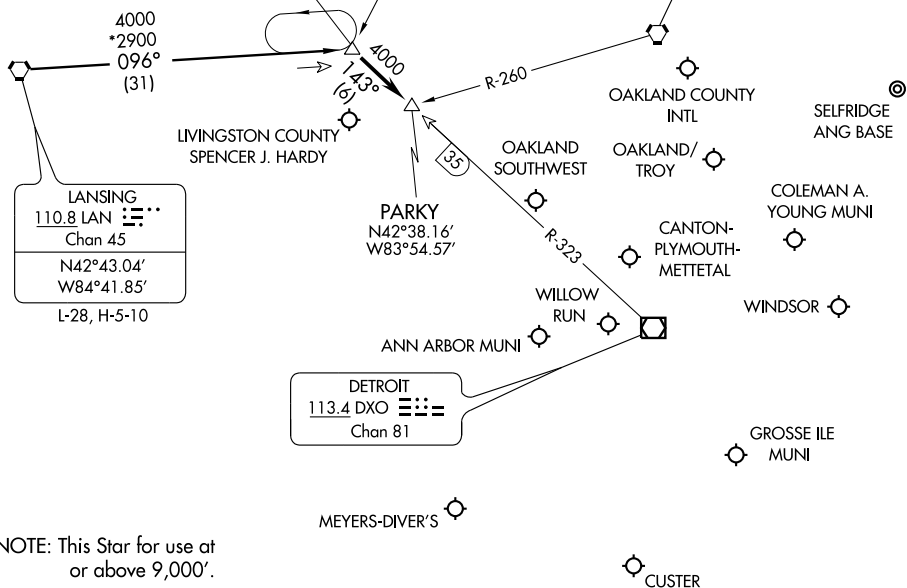
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

SWWAN ONE ARRIVAL

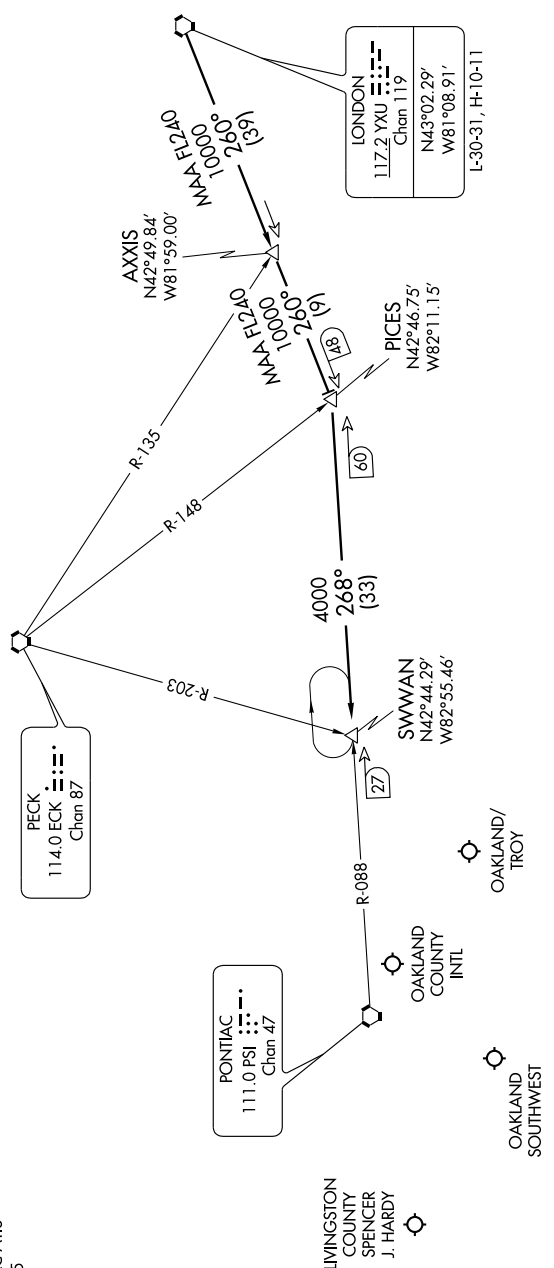
DETROIT APP CON
127.5 363.2
PONTIAC ATIS
125.025

SWWAN ONE ARRIVAL

(SWWAN.SWWAN1) 10042

ST-5052 (FAA)

PONTIAC, MICHIGAN



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.
NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

PONTIAC, MICHIGAN

VORTAC SVM
114.3
 Chan **90**

APP CRS
311°

Rwy ldg TDZE
5002
943

Apt Elev
962

VOR RWY 31

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

- ▼ If local altimeter setting not received, use Bishop
 Int altimeter setting and increase all MDA's 80 feet.
 ▲ Visibility reduction by helicopters NA.

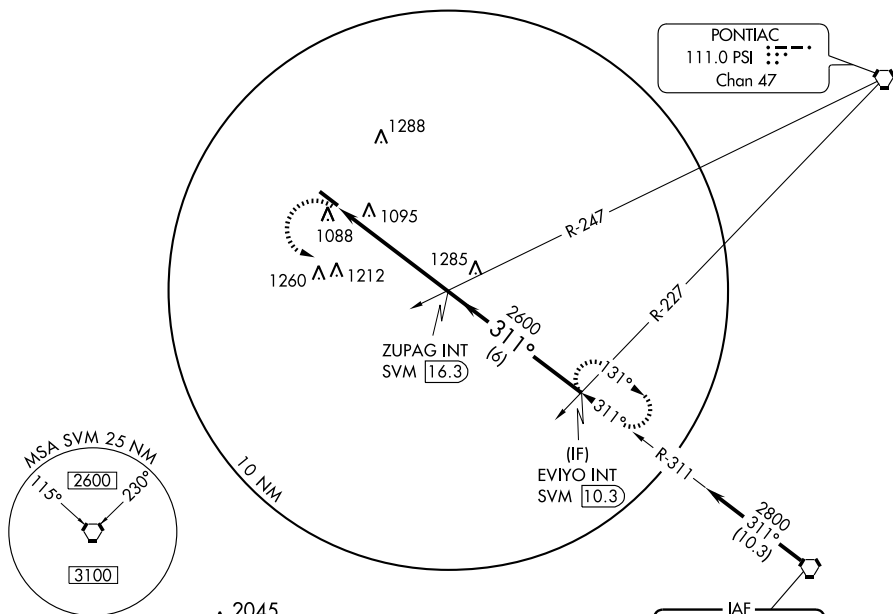
MISSED APPROACH: Climbing left turn to 2800 via heading
 090° and SVM R-311 to EVIYO Int/10.30 DME and hold.

AWOS-3
118.875

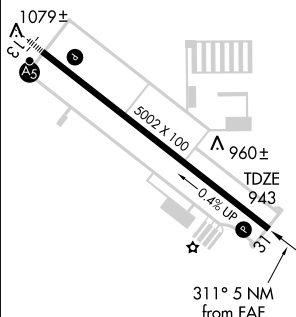
DETROIT APP CON
127.5 363.2

CLNC DEL
121.725 (GCO)

UNICOM
123.0 (CTAF) **0**



ELEV 962



HIRL Rwy 13-31 **0**
 REIL Rwy 31 **0**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

HOWELL, MICHIGAN
 Amdt 11 10154

2800

hdg 090°
SVM R-311

EVIYO INT
SVM 10.3

2800

EVIYO INT
SVM 10.3

ZUPAG INT
SVM 16.3

2800

EVIYO INT
SVM 10.3

2600

311°

SVM 21.3

≤ 3.04°

TCH 45

5 NM

6 NM

Procedure Turn NA

VGSI and descent angles not coincident.

CATEGORY	A	B	C	D
S-31	1540-1 597 (600-1)	1540-1¼ 597 (600-1¼)	1540-1½ 597 (600-1½)	1540-1¾ 597 (600-1¾)
CIRCLING	1540-1 578 (600-1)	1540-1¼ 578 (600-1¼)	1540-1½ 578 (600-1½)	1540-2 578 (600-2)

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)
 42°38'N - 83°59'W

VOR RWY 31

RAETHER (4Y1) 6 SE UTC-5(-4DT) N42°33.91' W83°51.38'

**DETROIT
COPTER**

982 NOTAM FILE LAN

RWY 17-35: 2206X60 (TURF)

RWY 17: Thld dsplcd 540'. Trees.

RWY 35: Thld dsplcd 553'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer on and invof rwy. Ultralight activity on and invof arpt. Heavy equipment adjacent to W side of Rwy 35. Rwy 17-35 thld and dsplcd thlds marked with 3' cones.

COMMUNICATIONS: CTAF 122.9

HURON CO MEM (See BAD AXE)

INDIAN CREEK RANCH (See DECKERVILLE)

INDIAN RIVER

CALVIN CAMPBELL MUNI (Y65) 1 E UTC-5(-4DT) N45°24.50' W84°36.00'

**LAKE HURON
L-31C**

602 FUEL 100LL NOTAM FILE LAN

RWY 10-28: H3006X50 (ASPH) LIRL

RWY 10: Trees.

RWY 28: Thld dsplcd 600'. Trees.

AIRPORT REMARKS: Attended irregularly. Snow removal intermittent; to verify condition call 231-238-8614. Deer and birds on and invof arpt. ACTIVATE LIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 175° 13.6 NM to fld. 840/6W.
HIWAS.

INTERLOCHEN

GREEN LAKE (Y88) 3 S UTC-5(-4DT) N44°36.37' W85°45.51'

GREEN BAY

866 NOTAM FILE LAN

RWY 05-23: 2800X170 (TURF)

RWY 05: Trees.

RWY 23: Thld dsplcd 600'. Trees.

RWY 16-34: 1700X170 (TURF)

RWY 16: Thld dsplcd 200'. Trees.

RWY 34: Thld dsplcd 380'. Trees.

AIRPORT REMARKS: Unattended. CLOSED Nov-Mar. Remote control model acft opr area south of Rwy 34 end. 460' antenna 1.25 NM N of arpt. Noise sensitive area one mile N of arpt. Athletic flds on centerline N end Rwy 16-34; Do not use rwy when in use. Rwy 05-23 and Rwy 16-34 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

IONIA CO (Y70) 3 S UTC-5(-4DT) N42°56.28' W85°03.63'

**CHICAGO
L-281
IAP**

818 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 09-27: H4300X75 (ASPH) S-19 MIRL 0.3% up W

RWY 09: PAPI(P4L)—GA 3.0° TCH 25'. Tree.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Trees.

RWY 18-36: 4290X340 (TURF) 0.3% up S

RWY 18: Trees.

RWY 36: Tree.

AIRPORT REMARKS: Attended 1400-2200Z±. Rwy 18-36 CLOSED Nov 15-Apr 15. Glider ops conducted S of Rwy 09-27 and W of Rwy 18-36 use freq 123.3 in practice area. Gliders use 122.8 in tfc pattern. ACTIVATE rotating bcn—122.8. ACTIVATE MIRL Rwy 09-27, PAPI and REIL Rwy 27—122.8. Rwy 18 ends marked with 3' yellow cones. Acft parked adjacent to Rwy 18-36 and 09-27 during glider operations.

WEATHER DATA SOURCES: AWOS-3 118.9 (616) 523-1852.

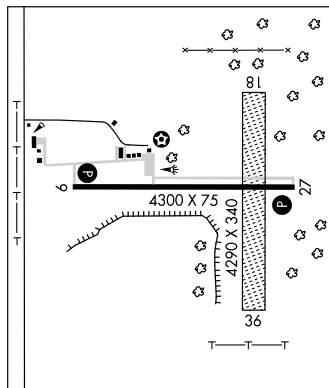
COMMUNICATIONS: CTAF/UNICOM 122.8

GRAND RAPIDS RCO 122.1R 115.95 (LANSING RADIO)

® **LANSING APP/DEP CON** 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 315° 20.8 NM to fld. 887/5W.



IOSCO CO (See EAST TAWAS)

IRON CO (See CRYSTAL FALLS)

APP CRS
276°

Rwy Idg	4300
TDZE	812
Apt Elev	818

RNAV (GPS) RWY 27
IONIA COUNTY (Y70)

IONIA COUNTY (Y70)

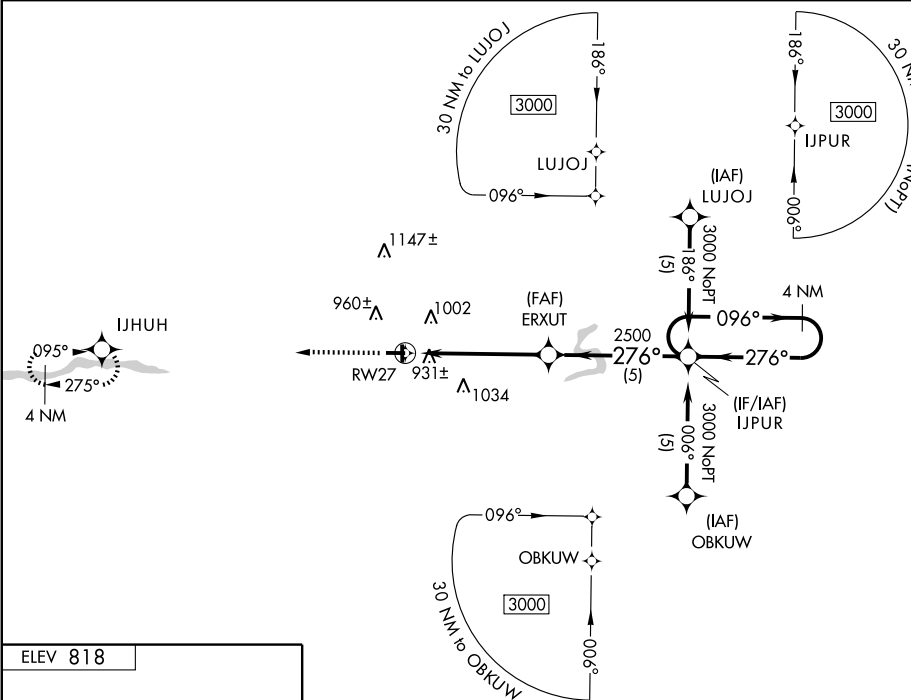


Use Lansing altimeter setting.
DME/DME RNP-0.3 NA.
GPS or RNP-0.3 required.

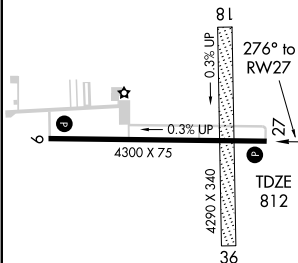
MISSED APPROACH: Climb to 3000 direct IJUH
WP and hold.

AWOS-3
118.9

LANSG APP CON
118.65 226.4

UNICOM
122.8 (CTAF) **L**

ELEV 818



REIL Rwy 27 **L**
MIRI Rwy 9-27 **L**

IONIA, MICHIGAN
Orig-A 10042

42°56'N - 85°04'W

IONIA COUNTY (Y70)

RNAV (GPS) RWY 27

EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC LAN 110.8 Chan 45	APP CRS 315°	Rwy Idg TDZE Apt Elev N/A N/A 818
--	------------------------	---

VOR-A
IONIA COUNTY (Y70)

▼ Use Lansing altimeter setting; when not received, use Charlotte altimeter setting and increase all MDAs 20 feet, and increase Cat C visibility ¼ mile.

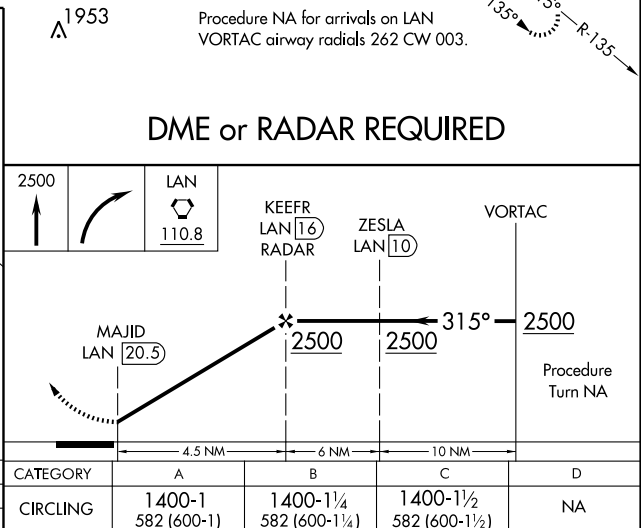
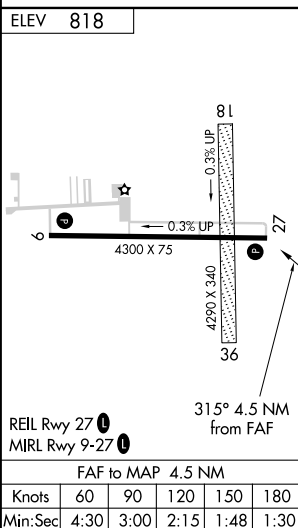
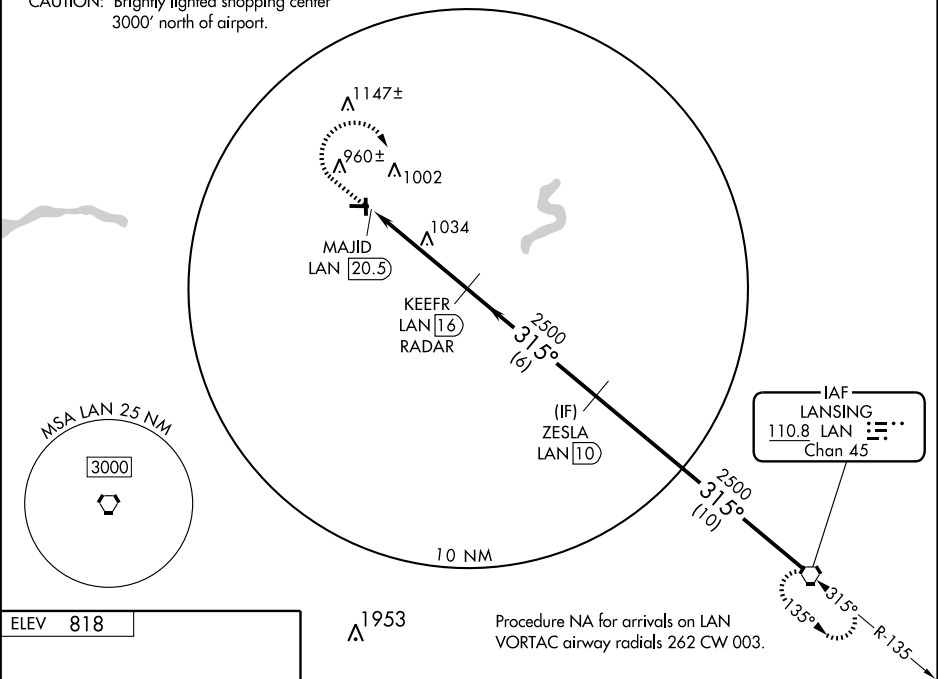
MISSED APPROACH: Climb to 2500 then right turn direct LAN VORTAC and hold.

AWOS-3
118.9

LANSING APP CON
118.65 226.4

UNICOM
122.8 (CTAF) 0

CAUTION: Brightly lighted shopping center 3000' north of airport.



IRON MOUNTAIN N45°48.96' W88°06.73' NOTAM FILE IMT.**GREEN BAY**

(L) VOR/DME 111.2 IMT Chan 49 at Ford. 1128/2W.

L-31A

DME unusable 141°–220° byd 20 NM blo 2900'; 221°–315° byd 15 NM blo 4000'; 316°–019° byd 20 NM blo 5000', 020°–140° blo 10000'.

RCO 122.1R 111.2T (GREEN BAY RADIO)

IRON MOUNTAIN/KINGSFORD**FORD** (IMT) 3 W UTC–6(–5DT) N45°49.10' W88°06.87'**GREEN BAY**1182 B S4 **FUEL** 100LL, JET A OX 4 TPA—See Remarks Class I, ARFF Index A**H–21, L–31A**

NOTAM FILE IMT

IAP

RWY 01–19: H6501X150 (ASPH–PFC) S–100, D–100, 2S–127, 2D–190 HIRL 0.8% up N

RWY 01: MALSR. Trees.

RWY 19: REIL. VASI(V4L)—GA 3.0° TCH 42'.

RWY 13–31: H3809X75 (ASPH) S–30, D–50, 2D–80 MIRL

RWY 13: Trees.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA–6501 TODA–6501 ASDA–6501 LDA–6501

RWY 13: TORA–3809 TODA–3809 ASDA–3809 LDA–3809

RWY 19: TORA–6501 TODA–6501 ASDA–6501 LDA–6501

RWY 31: TORA–3809 TODA–3809 ASDA–3809 LDA–3809

AIRPORT REMARKS: Attended 1130–0530Z†. Ldg fee. Deer; coyotes and

birds on and invof arpt. 48 hr PPR for unscheduled air carrier ops

with more than 30 passenger seats call 906–774–4830. Air

carrier ops involving acft with more than 9 passenger seats are

not authorized in excess of 15 minutes before or after scheduled

arrival/dep times without prior coordination with arpt manager and

confirmation that ARFF is avbl prior to tkf or landing. ARFF crews

will be monitoring UNICOM/CTAF during all air carrier ops. Snow

removal crew will be monitoring CTAF/UNICOM during all air

carrier ops to pass along updated sfc condition reports. ACTIVATE HIRL Rwy 01–19, MIRL Rwy 13–31, VASI Rwy

19 and 31; REIL Rwy 19 and 31; MALSR Rwy 01—CTAF. TPA—1982(800) Jet/Turbo–Jet/Prop over 12,500 lbs

2682(1500).

WEATHER DATA SOURCES: ASOS 119.025 (906) 774–1999.**COMMUNICATIONS:** CTAF/UNICOM 122.8

IRON MOUNTAIN RCO 122.1R 111.2T (GREEN BAY RADIO)

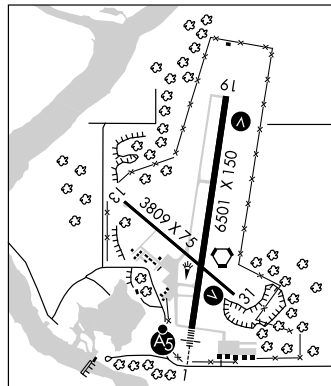
MINNEAPOLIS CENTER APP/DEP CON 121.25

AIRSPACE: CLASS E svc Mon–Fri 1200–0400Z†, Sat 1500–0100Z†, Sun 1500–0400Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' at fld. 1128/2W.

KORDS NDB (LOM) 255 IM N45°43.63' W088°07.96' 010° 5.5 NM to fld.

ILS 111.5 I–IMT Rwy 01. Class IC. LOM KORDS NDB.

COMM/NAV/WEATHER REMARKS: UNICOM monitored part–time.**IRON RIVER****STAMBAUGH** (Y73) 1 SE UTC–6(–5DT) N46°04.73' W88°38.13'**GREEN BAY**

1622 NOTAM FILE GRB

RWY 17–35: H2000X40 (ASPH) LIRL (NSTD)

RWY 17: Trees.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. 100' drop off at each rwy end. Rwy 17–35 slopes down from

S to N. ACTIVATE LIRL Rwy 17–35—121.9. Rwy 17–35 NSTD LIRL 26' from rwy edge. Rwy 17–35 NSTD basic

marking; does not start at pavement edge. Rwy 17–35 numerous cracks in rwy.

COMMUNICATIONS: CTAF 122.9**IRONWOOD** N46°31.94' W90°07.55' NOTAM FILE IWD.**GREEN BAY**

(L) VORTACW 108.8 IWD Chan 25 at Gogebic–Iron Co. 1230/1E. HIWAS.

L–141

RCO 122.3 (GREEN BAY RADIO)

LOC I-IMT 111.5	APP CRS 010°	Rwy Idg TDZE Apt Elev	6501 1133 1182
---------------------------	------------------------	-----------------------------	---

ILS RWY 1

IRON MOUNTAIN/FORD (IMT)

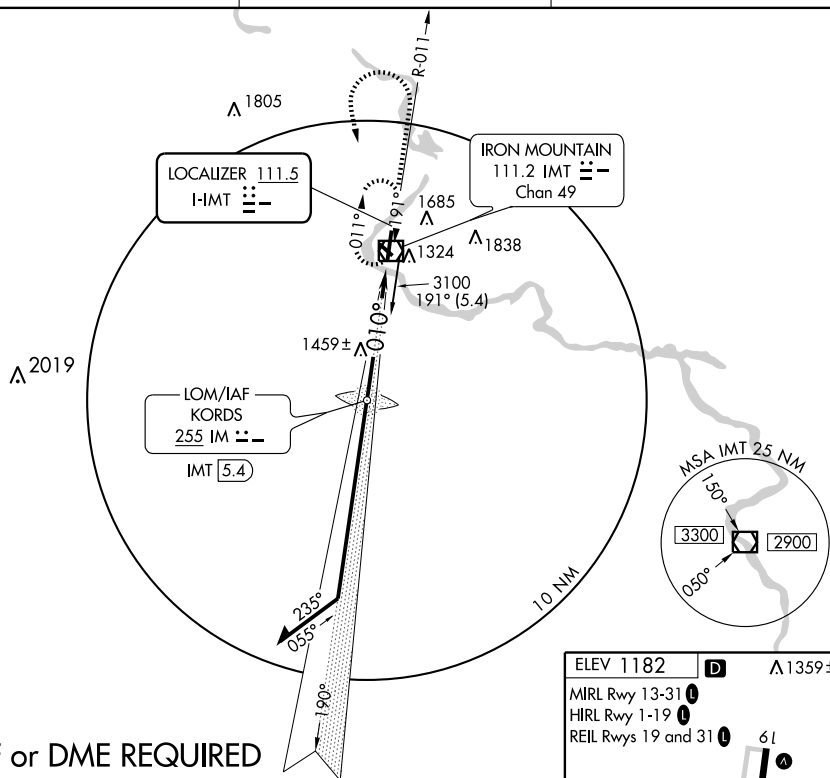


Circling not authorized NE of Rwy 19 and 31.

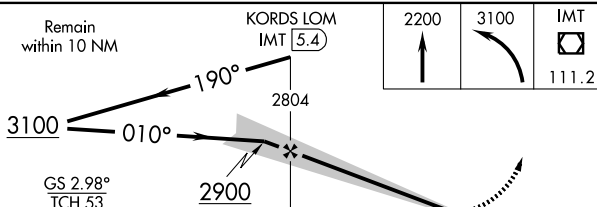
MALSR



MISSED APPROACH: Climb to 2200, then climbing left turn to 3100 direct IMT VOR/DME and hold.

ASOS
119.025MINNEAPOLIS CENTER
121.25 322.5UNICOM
122.8 (CTAF) **0**

ADF or DME REQUIRED

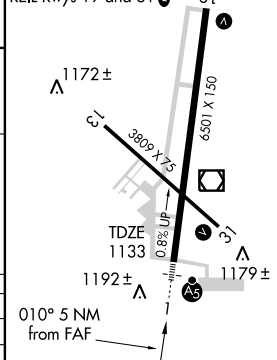
Remain
within 10 NM

CATEGORY	A	B	C	D
S-ILS 1	1333-½ 200 (200-½)			
S-LOC 1	1720-½ 587 (600-½)		1720-1 587 (600-1)	1720-1¼ 587 (600-1¼)
CIRCLING	1720-1 538 (600-1)		1780-1½ 598 (600-1½)	1780-2 598 (600-2)

IRON MOUNTAIN/KINGSFORD, MICHIGAN

Amdt 12 09351

45°49'N - 88°07'W

ELEV 1182 **D** **A** 1359±MIRL Rwy 13-31 **0**HIRL Rwy 1-19 **0**REIL Rwy 19 and 31 **0**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

IRON MOUNTAIN/FORD (IMT)

ILS RWY 1

LOC I-INT 111.5	APP CRS 190°	Rwy Idg 6501 TDZE 1182 Apt Elev 1182
---------------------------	------------------------	---

LOC/DME BC RWY 19

IRON MOUNTAIN/FORD (IMT)

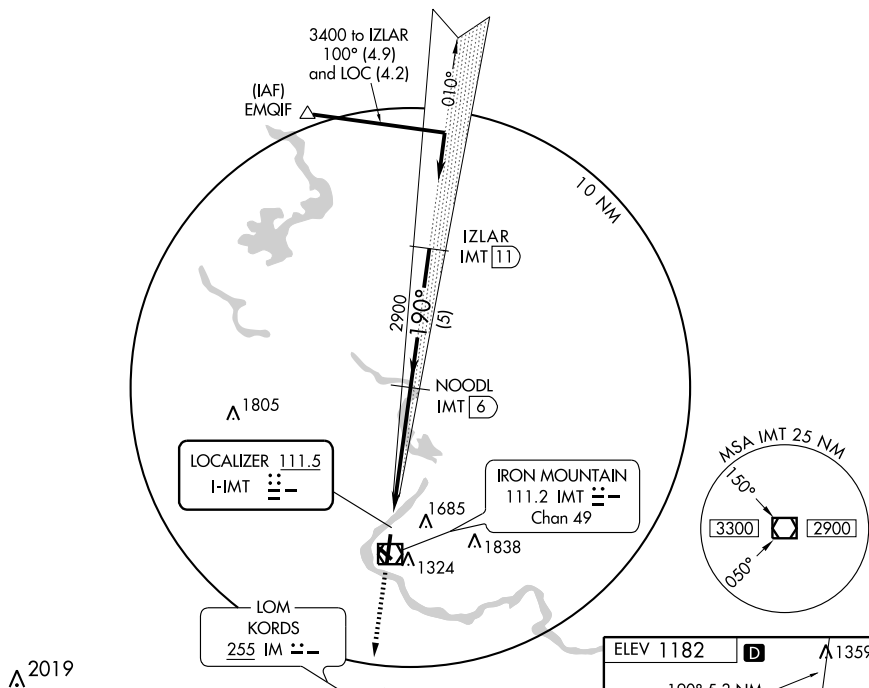


Circling not authorized NE of Rwy 19 and 31.
DME from IMT VOR/DME.
Simultaneous reception of I-IMT and IMT DME required.

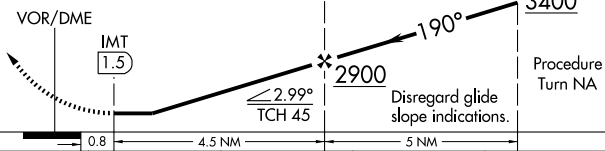
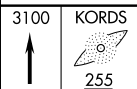
MISSED APPROACH: Climb to 3100
direct KORDS LOM and hold.

ASOS
119.025

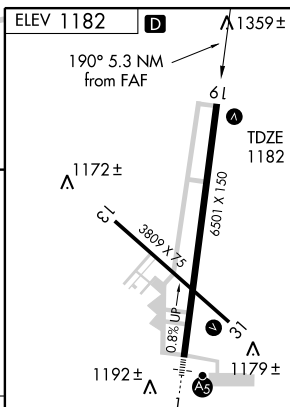
MINNEAPOLIS CENTER
121.25 322.5

UNICOM
122.8 (CTAF) 

BACK COURSE
ADF REQUIRED



CATEGORY	A	B	C	D
S-19	1660-1	478 (500-1)	1660-1½ 478 (500-1½)	1660-1½ 478 (500-1½)
CIRCLING	1660-1 478 (500-1)	1720-1 538 (600-1)	1780-1½ 598 (600-1½)	1780-2 598 (600-2)



MIRL Rwy 13-31 **L**
HIRL Rwy 1-19 **L**
REIL Rwy 19 and 31 **L**

IRON MOUNTAIN/KINGSFORD, MICHIGAN

Amdt 13 09351

45°49'N - 88°07'W


IRON MOUNTAIN/ FORD (IMT)

LOC/DME BC RWY 19

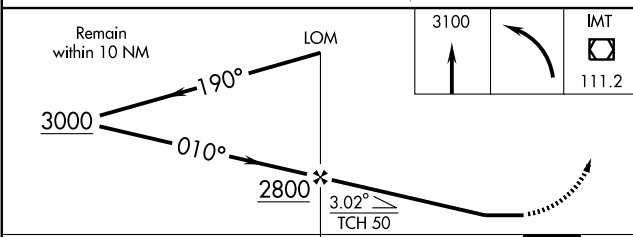
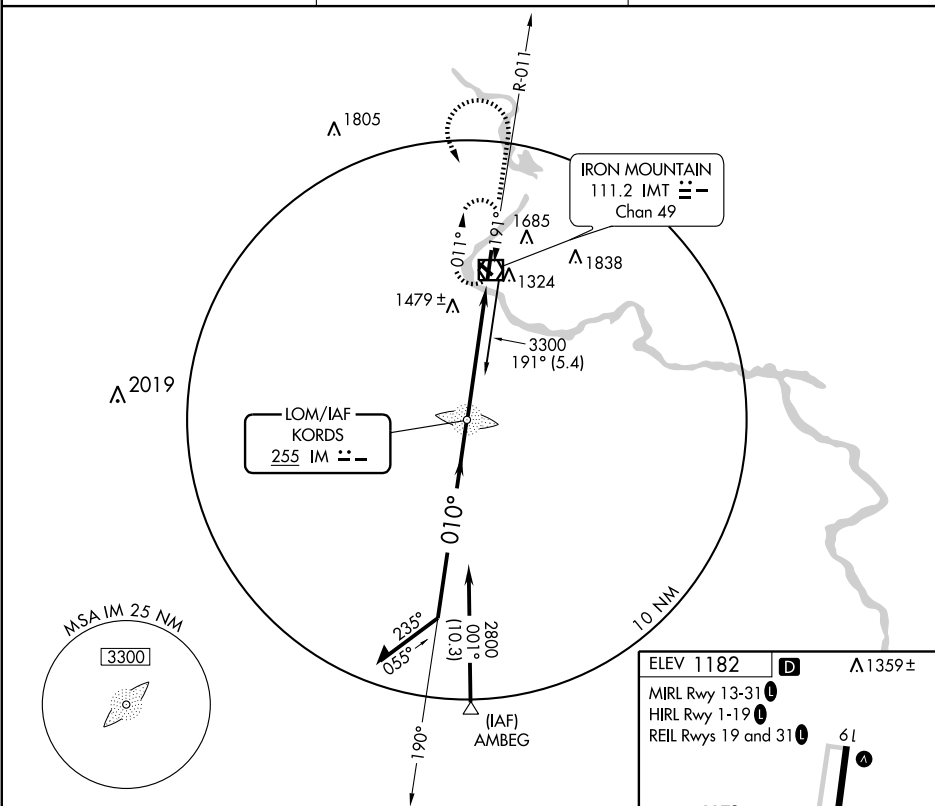
EC-1. 26 AUG 2010 to 23 SEP 2010

LOM IM <u>255</u>	APP CRS 010°	Rwy Idg 6501 TDZE 1133 Apt Elev 1182
-----------------------------	------------------------	---

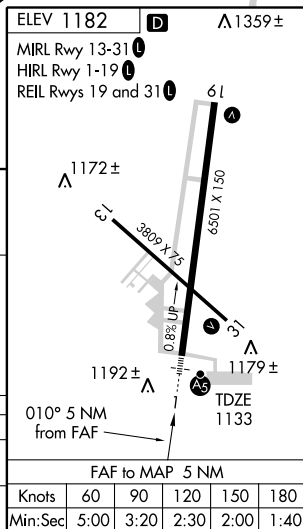
NDB RWY 1
IRON MOUNTAIN/FORD (IMT)

<p>T Circling not authorized NE of Rwy 19 and 31. Circling not authorized at night to Rwy 31.</p>	<p>MALSR </p>	<p>MISSED APPROACH: Climb to 3100, then left turn direct IMT VOR/DME and hold.</p>
--	--	--

ASOS 119.025	MINNEAPOLIS CENTER 121.25 322.5	UNICOM 122.8 (CTAF) 0
------------------------	---	---------------------------------



CATEGORY	A	B	C	D
S-1	1780-3 $\frac{1}{4}$	647 (600-3 $\frac{1}{4}$)	1780-1 $\frac{1}{4}$ 647 (600-1 $\frac{1}{4}$)	1780-1 $\frac{3}{4}$ 647 (600-1 $\frac{3}{4}$)
CIRCLING	1780-1	598 (600-1)	1780-1 $\frac{3}{4}$ 598 (600-1 $\frac{3}{4}$)	1780-2 598 (600-2)



WAAS CH 77811 W01A	APP CRS 010°	Rwy Idg TDZE 1133 Apt Elev 1182	6501
--	------------------------	---	-------------

RNAV (GPS) RWY 1

IRON MOUNTAIN/FORD (IMT)

▼ Inoperative table does not apply to LPV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Circling NA NE of Rwy 19 and 31. DME/DME RNP-0.3

▲ NA. When local altimeter setting not received, use Escanaba altimeter setting and increase all DA/MDA 180 feet, increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ¾ mile, LNAV Cat C and D visibility ½ mile, and Circling Cat B visibility ¼ mile, Cat C and D visibility ½ mile. For inoperative MALSR increase visibility LNAV Cat A and B ¼ mile. For Inoperative MALSR when using Escanaba altimeter setting, increase LPV all Cats visibility to 1 ½ mile, LNAV Cat A visibility to 1 mile. Baro-VNAV and VDP NA when using Escanaba altimeter setting.

MALSR

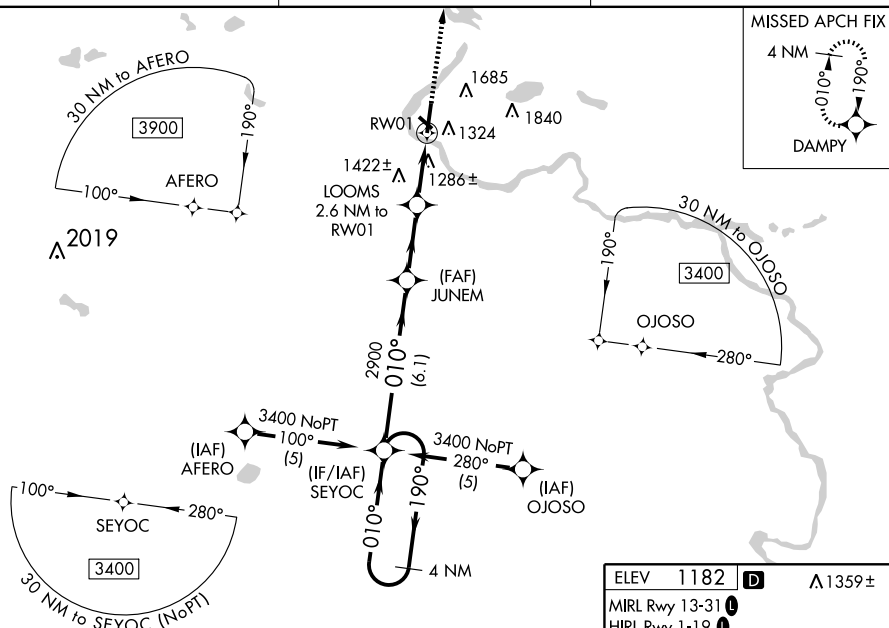


MISSED
APPROACH:
Climb to 3400
direct DAMPY
and hold.

ASOS
119.025

MINNEAPOLIS CENTER
121.25 322.5

UNICOM
122.8 (CTAF)

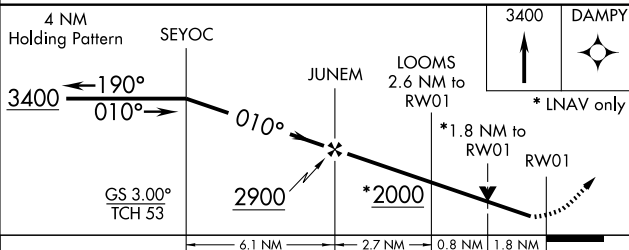


ELEV **1182** **D** **A1359±**

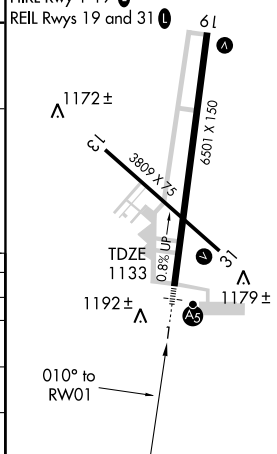
MIRL Rwy 13-31 **L**

HIRL Rwy 1-19 **L**

REIL Rwy 19 and 31 **L**



CATEGORY	A	B	C	D
LPV DA	1383-¾ 250 (300-¾)			
LNAV/VNAV DA	1806-2 673 (700-2)			
LNAV MDA	1760-¾ 627 (600-¾)	1760-1¼ 627 (600-1¼)	1760-1½ 627 (600-1½)	
CIRCLING	1760-1 578 (600-1)	1780-1¾ 598 (600-1¾)	1780-2 598 (600-2)	



APP CRS
190°

Rwy Idg **6501**
TDZE **1182**
Apt Elev **1182**

RNAV (GPS) RWY 19

IRON MOUNTAIN/FORD (IMT)

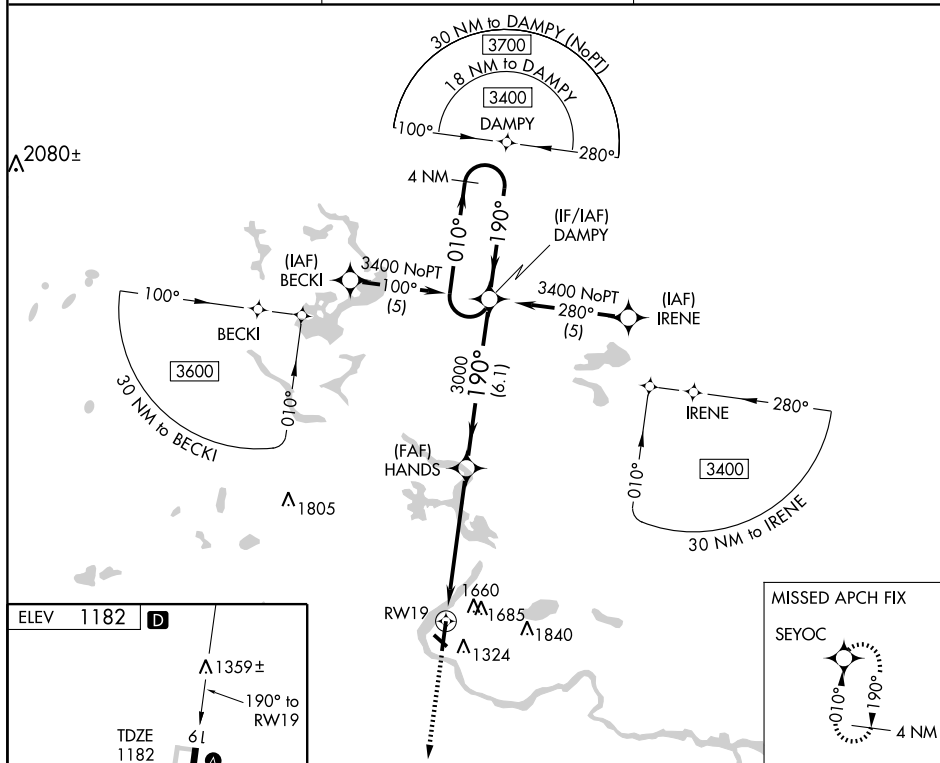
⚠ Circling NA northeast of Rwy 19 and 31. DME/DME RNP-0.3 NA.
⚠ Visibility reduction by helicopters NA.
When local altimeter setting not received, use Escanaba altimeter setting and increase all MDA 180 feet, increase LNAV and Circling Cat B visibility ¼ mile, Cats C and D visibility ¾ mile.

MISSED APPROACH: Climb to 3400
direct SEYOC and hold.

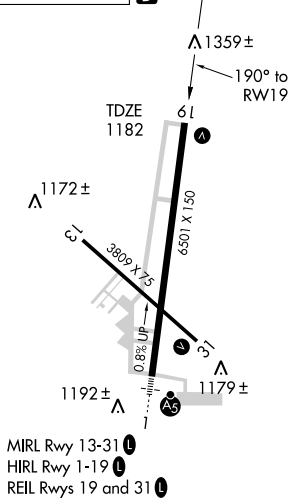
ASOS
119.025

MINNEAPOLIS CENTER
121.25 322.5

UNICOM
122.8 (CTAF) **0**

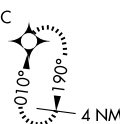


ELEV 1182 **D**

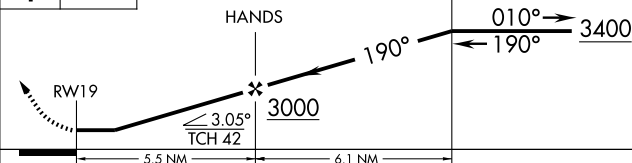


MISSED APCH FIX

SEYOC



DAMPY Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1760-1 578 (600-1)	1760-1½ 578 (600-1½)	1760-1½ 578 (600-1½)	1760-1¾ 578 (600-1¾)
CIRCLING	1760-1 578 (600-1)	1780-1½ 598 (600-1½)	1780-1½ 598 (600-1½)	1780-2 598 (600-2)

VOR/DME IMT 111.2 Chan 49	APP CRS 323°	Rwy Idg TDZE Apt Elev 1131	3809 1131 1182
---	------------------------	---	---

VOR RWY 31

IRON MOUNTAIN/FORD (IMT)

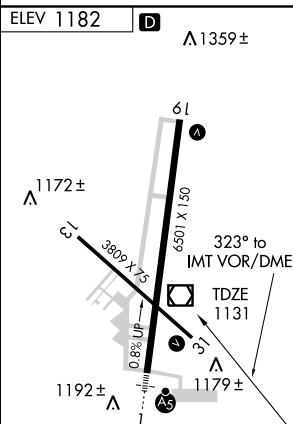
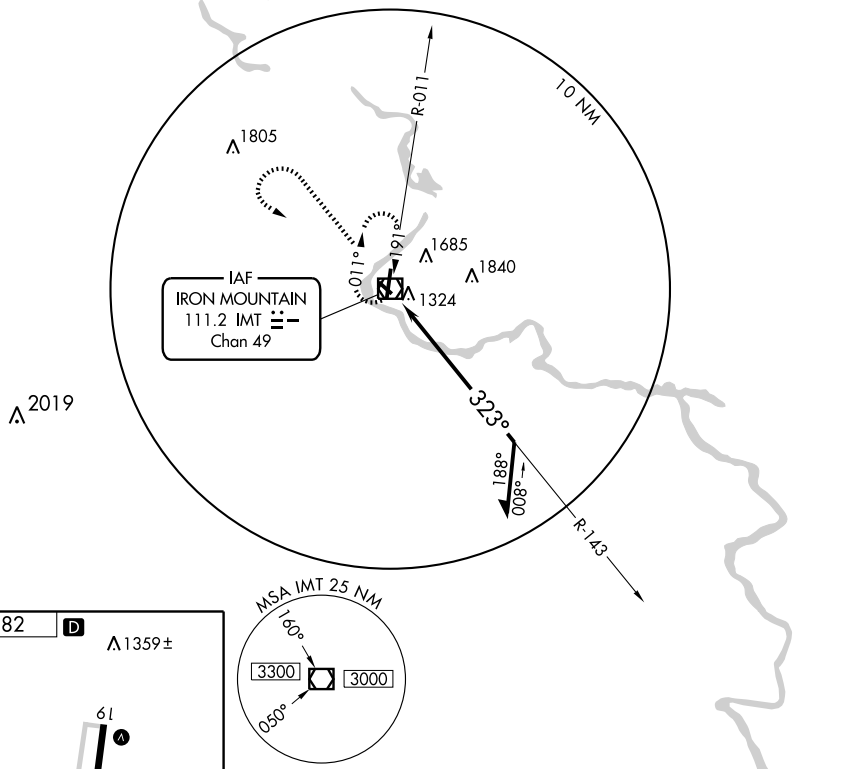
▼ Circling NA NE of Rwy 19 and 31. Procedure NA at night. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Escanaba altimeter setting and increase all MDA 180 feet, and increase S-31 and Circling Cat B visibility ¼ mile and Cats C and D visibility ½ mile.

MISSED APPROACH: Climb to 3100 then left turn direct IMT VOR/DME and hold.

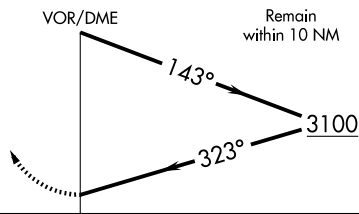
ASOS
119.025

MINNEAPOLIS CENTER
121.25 322.5

UNICOM
122.8 (CTAF) 0



MIRL Rwy 13-31 **1**
 HIRL Rwy 1-19 **1**
 REIL Rws 19 and 31 **1**



CATEGORY	A	B	C	D
S-31	1760-1 629 (600-1)		1760-1¾ 629 (600-1¾)	1760-2 629 (600-2)
CIRCLING	1760-1 578 (600-1)		1780-1¾ 598 (600-1¾)	1780-2 598 (600-2)

IRONWOOD

GOGEBIC—IRON CO

(IWD) 7 NE UTC-6(-5DT) N46°31.65' W90°07.88'

1230 B FUEL 100LL, JET A Class II, ARFF Index A NOTAM FILE IWD
RWY 09-27: H6501X130 (ASPH-GRVD) S-85, D-150, 2S-175, 2D-280 HIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 47'. Trees.

RWY 27: MALSR. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 27: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 1400-0200Z±. Be alert for PAEW during snow removal. Arpt signs may be snow covered during winter months. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except 48 hr PPR call arpt manager 906-932-3121. Various wildlife on and in/ovf arpt. ACTIVATE HIRL Rwy 09-27; REIL Rwy 09; MALSR Rwy 27—CTAF. Ldg fee. Landing fees waived if fuel purchased. Firefighting personnel will be monitoring CTAF during all scheduled air carrier ops. Arpt will be monitoring CTAF during all scheduled air carrier ops to convey latest rwy conditions during winter wx.

WEATHER DATA SOURCES: AWOS-3 125.175 (906) 932-4039.

HIWAS 108.8 IWD.

COMMUNICATIONS: CTAF/UNICOM 122.8

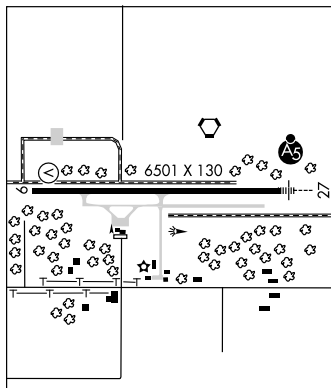
IRONWOOD RCD 122.3 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP 133.55

RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94' W90°07.55' at fld. 1230/1E. HIWAS.

ILS 111.5 I-IWD Rwy 27. Class II. Unmonitored.



GREEN BAY

H-21, L-141

IAP

ISHPEMING

EDWARD F JOHNSON

(M61) 10 S UTC-5(-4DT) N46°20.71' W87°47.31'

GREEN BAY

1446 NOTAM FILE GRB

RWY 18-36: 2200X100 (TURF)

RWY 18: Trees.

RWY 36: Thld dsplcd 200'. Trees.

AIRPORT REMARKS: Unattended. CLOSED winter months Dec-Apr and when snow covered. Rwy 18-36 rough with sandy areas. Lgt 419' AGL twr located 6100' south of arpt and 600' right of extended centerline Rwy 18-36.

Rwy 18 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

JABLONSKI

(See NUNICA)

JACK BARSTOW

(See MIDLAND)

LOC I-WD 111.5	APP CRS 270°	Rwy Idg TDZE Apt Elev	6501 1230 1230
--------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

NA When local altimeter setting not received, use Ashland altimeter setting and increase all DA 132 feet and all MDA 140 feet, increase S-LOC 27 Cat C/D visibility ½ mile, Circling Cat A/B visibility ¼ mile and Circling Cat C ½ mile. For inoperative MALSR, when using Ashland altimeter setting, increase S-ILS 27 all Cats visibility to 1.

MALSR



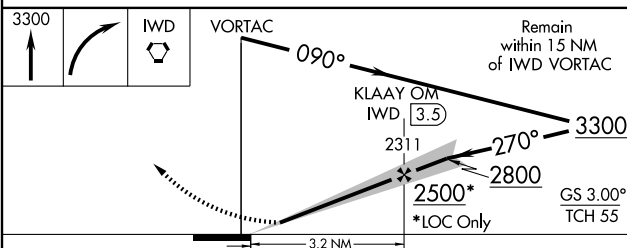
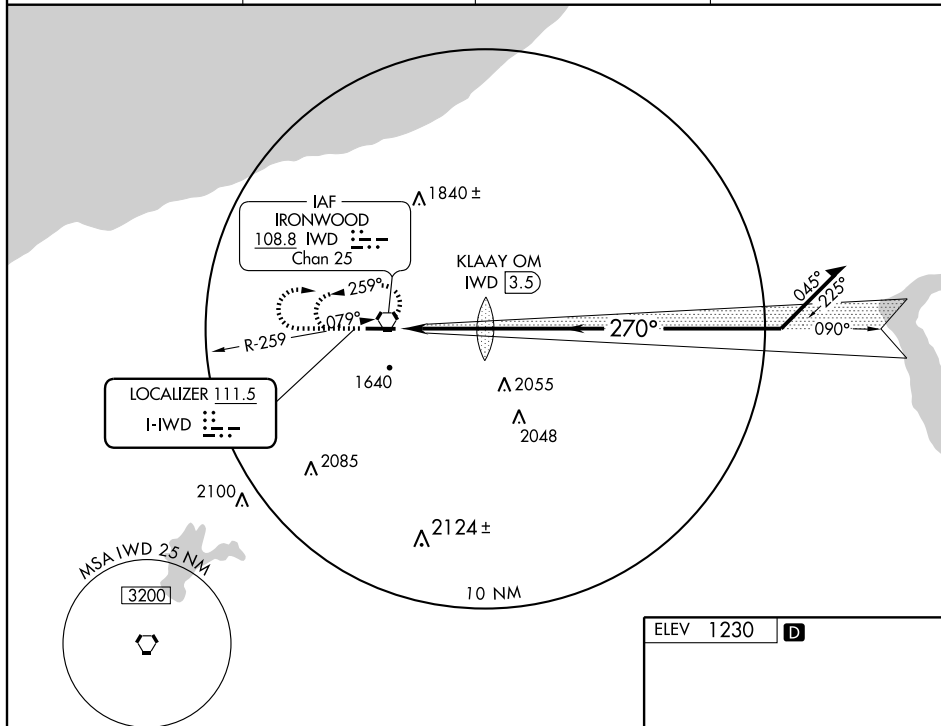
MISSED APPROACH: Climb to 3300, then right turn direct IWD VORTAC and hold.

AWOS-3
125.175

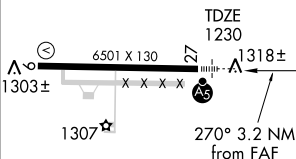
MINNEAPOLIS CENTER
133.55

GREEN BAY RADIO
122.3

UNICOM
122.8 (CTAF) **U**



ELEV 1230 **D**



CATEGORY	A	B	C	D
S-ILS 27	1430-½	200 (200-½)		
S-LOC-27	1720-½	490 (500-½)	1720-¾	1720-1
			490 (500-¾)	490 (500-1)
CIRCLING	2100-1	2100-1¼	2100-2½	2220-3
	870 (900-1)	870 (900-1¼)	870 (900-2½)	990 (1000-3)

REIL Rwy 9 **U**
HIRL Rwy 9-27 **U**

FAF to MAP 3.2 NM

Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

APP CRS
090°

Rwy Idg **6501**
TDZE **1230**
Apt Elev **1230**

RNAV (GPS) RWY 9

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

▲ When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase LNAV Cat B visibility ¼ mile, Cat C/D ½ mile and increase Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

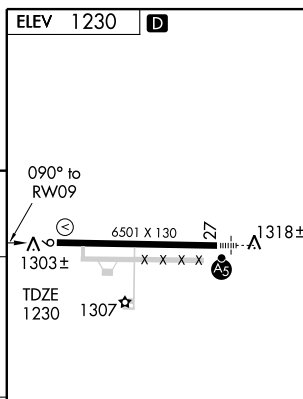
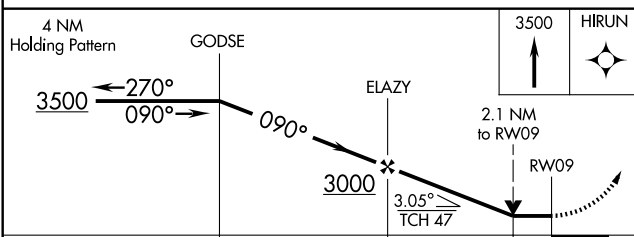
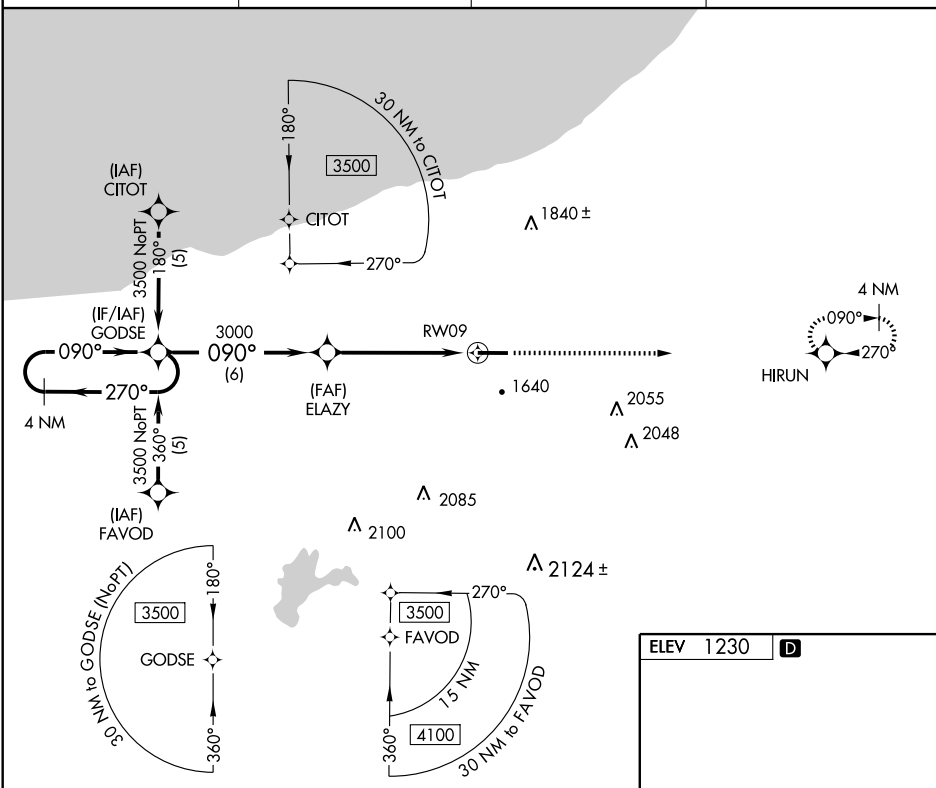
MISSED APPROACH: Climb to 3500 direct HIRUN and hold.

AWOS-3
125.175

MINNEAPOLIS CENTER
133.55

GREEN BAY RADIO
122.3

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
LNAV MDA	1940-1	710 (800-1)	1940-2	1940-2 ¼
			710 (800-2)	710 (800-2 ¼)
CIRCLING	2100-1	2100-1 ¼	2100-2 ½	2220-3
	870 (900-1)	870 (900-1 ¼)	870 (900-2 ½)	990 (1000-3)

REIL Rwy 9 0
HIRL Rwy 9-27 0

WAAS CH 50212 W27A	APP CRS 270°	Rwy Idg TDZE 1230 Apt Elev 1230
--	------------------------	---

RNAV (GPS) RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

▼ Inoperative table does not apply to LPV and LNAV/VNAV all Cats and LNAV Cats A and B.
▲ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When using Ashland altimeter setting: inoperative table does not apply to LNAV/VNAV all Cats and LNAV Cat A. When using Ashland altimeter setting: for inoperative MALS, increase LNAV Cat B visibility to 1 ¼ mile. Baro-VNAV and VDP NA when using Ashland altimeter setting. When local altimeter setting not received, use Ashland altimeter setting and increase all DA 132 feet and all MDA 140 feet, increase LNAV/VNAV Cat C visibility ¼ mile, LNAV Cat C/D visibility ½ mile, and Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

MALS



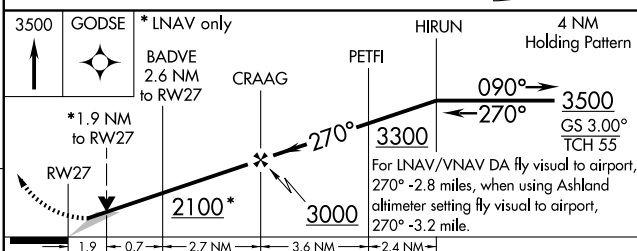
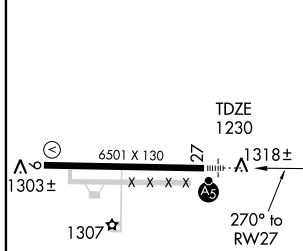
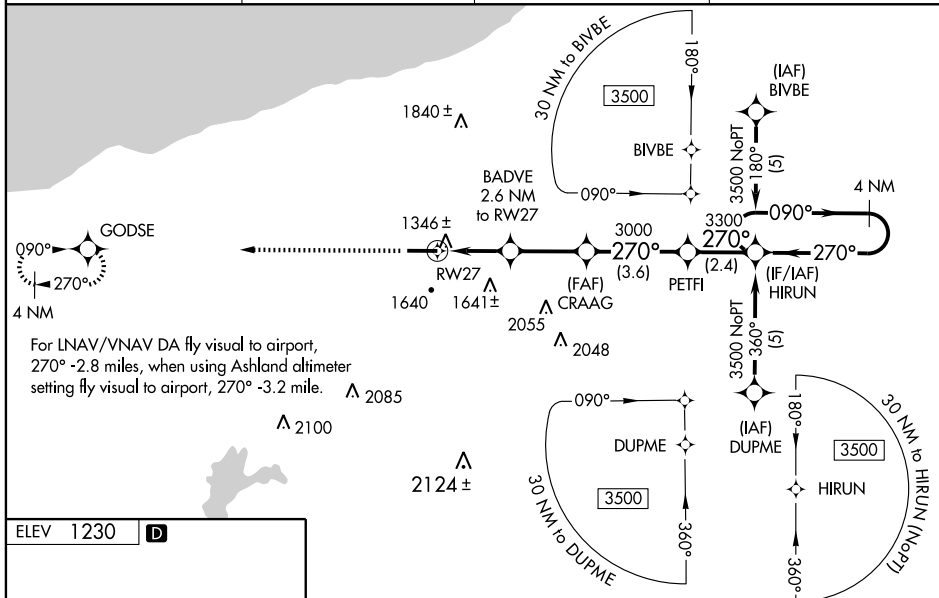
MISSED APPROACH:
Climb to 3500 direct
GODSE and hold.

AWOS-3
125.175

MINNEAPOLIS CENTER
133.55

GREEN BAY RADIO
122.3

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA	1430-1		200 (200-1)	
LNAV/VNAV DA	2166-2	936 (1000-2)	2166-2 ¾ 936 (1000-2 ¾)	2166-3 936 (1000-3)
LNAV MDA	1900-1	670 (700-1)	1900-1 ¼ 670 (700-1 ¼)	1900-1 ½ 670 (700-1 ½)
CIRCLING	2100-1 870 (900-1)	2100-1 ¼ 870 (900-1 ¼)	2100-2 ½ 870 (900-2 ½)	2220-3 990 (1000-3)

VORTAC IWD 108.8 Chan 25	APP CRS 079°	Rwy Idg TDZE Apt Elev	6501 1230 1230
--	------------------------	-----------------------------	---

VOR/DME RWY 9

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

V Visibility reduction by helicopters NA. When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase S-9 visibility Cat C ¼ mile, and Cat D ½ mile. Increase Circling visibility Cat A/B ¼ mile and Cat C ½ mile.

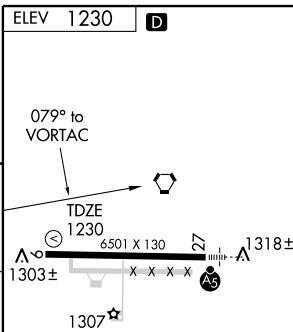
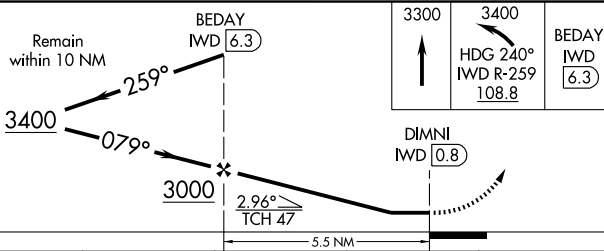
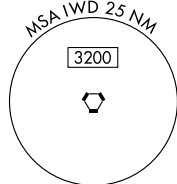
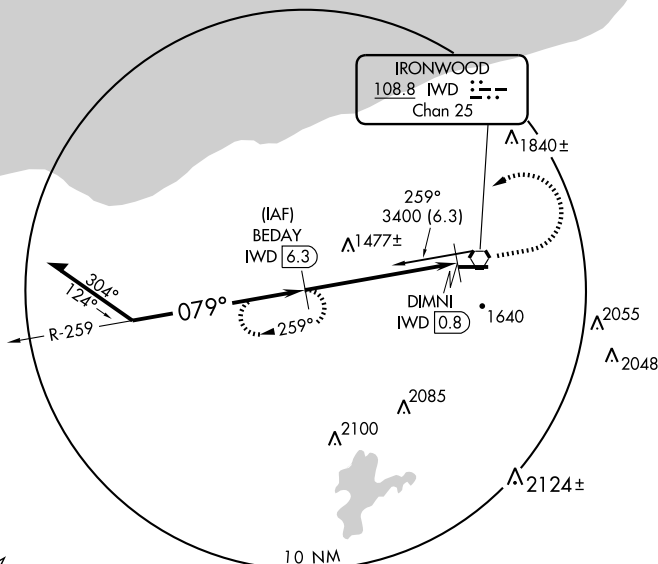
MISSED APPROACH: Climb to 3300 then climbing left turn to 3400 via heading 240° and IWD R-259 to BEDAY/6.3 DME and hold.

AWOS-3
125.175

MINNEAPOLIS CENTER
133.55

GREEN BAY RADIO
122.3

UNICOM
122.8 (CTAF) **1**



CATEGORY	A	B	C	D
S-9	1740-1	510 (600-1)	1740-1½	510 (600-1½)
CIRCLING	2100-1 870 (900-1)	2100-1¼ 870 (900-1¼)	2100-2½ 870 (900-2½)	2220-3 990 (1000-3)

REIL Rwy 9 **1**
HIRL Rwy 9-27 **1**

VORTAC IWD 108.8 Chan 25	APP CRS 283°	Rwy Idg TDZE 1230 Apt Elev 1230
---------------------------------------	------------------------	---

VOR/DME RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

▼ For inoperative MALSR when using Ashland altimeter setting, increase S-27 Cat A visibility to 1 mile. When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase S-27 Cat A/B visibility ¼ mile, Cat C/D ½ mile, increase Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

MALSR



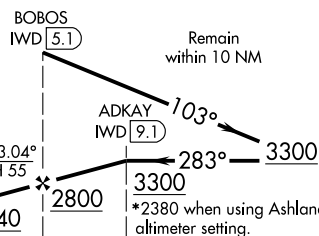
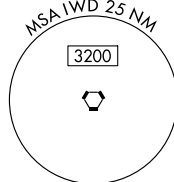
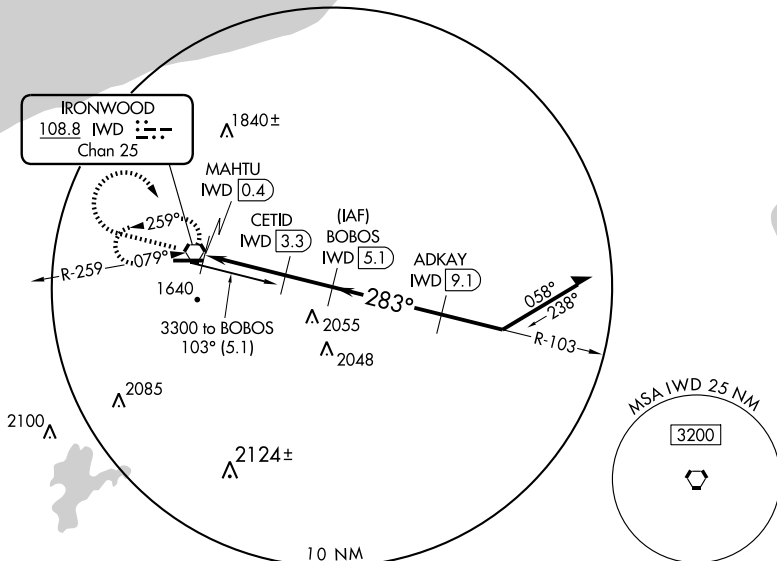
MISSED APPROACH: Climb to 3300 then right turn direct IWD VORTAC and hold.

AWOS-3
125.175

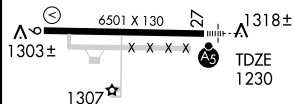
MINNEAPOLIS CENTER
133.55

GREEN BAY RADIO
122.3

UNICOM
122.8 (CTAF) **1**



ELEV 1230

D283° to
VORTAC

CATEGORY	A	B	C	D
S-27	1940-1/2	710 (800-1/2)	1940-1 1/2	1940-1 3/4
			710 (800-1/2)	710 (800-1 3/4)
CIRCLING	2100-1	2100-1 1/4	2100-2 1/2	2220-3
	870 (900-1)	870 (900-1 1/4)	870 (900-2 1/2)	990 (1000-3)

REIL Rwy 9 **1**
HIRL Rwy 9-27 **1**

10210

AIRPORT DIAGRAM

AL-861 (FAA)

JACKSON COUNTY-REYNOLDS FIELD (JXN)
JACKSON, MICHIGAN

ATIS
125.725
JACKSON TOWER ★
128.475 257.8
GND CON
121.9
CLNC DEL
121.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

42°16.0'N

42°15.5'N

42°15.0'N

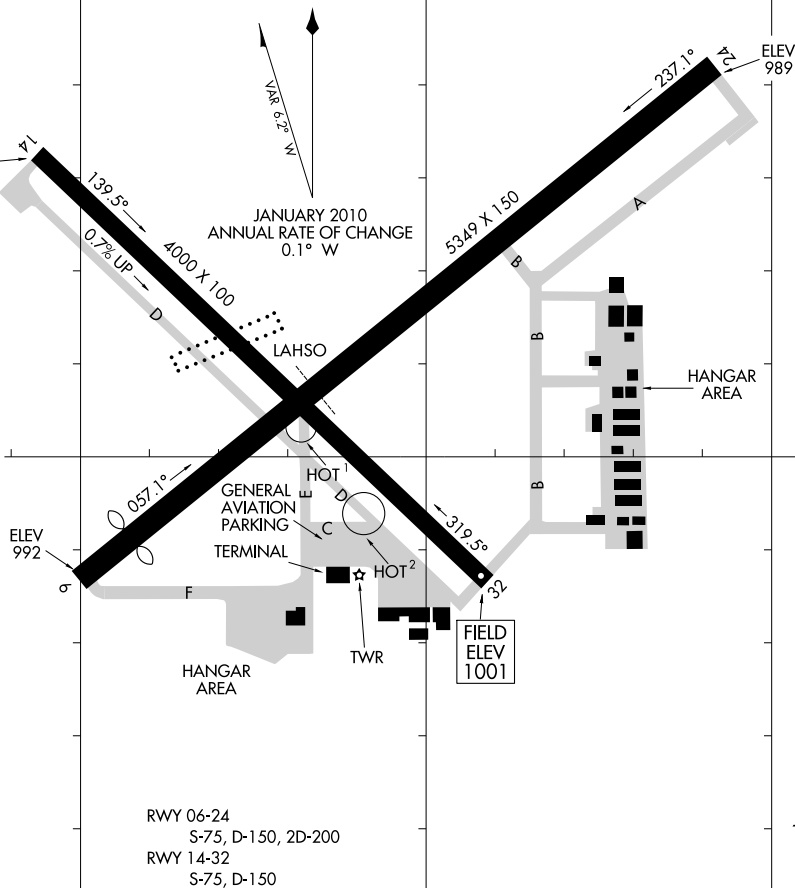
84°28.0'W

84°27.5'W

84°27.0'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



AIRPORT DIAGRAM

10210

JACKSON, MICHIGAN
JACKSON COUNTY-REYNOLDS FIELD (JXN)

JACKSON CO—REYNOLDS FLD (JXN) 2 W UTC-5(-4DT) N42°15.63' W84°27.63'

DETROIT

1001 B S4 FUEL 100LL, JET A NOTAM FILE JXN

H-106, L-28J

RWY 06-24: H5349X150 (ASPH - GRVD) S-75, D-150, 2D-200 HIRL

IAP, AD

RWY 06: VASI(V4L)—GA 3.0° TCH 27'. Thld dsplcd 440'. Railroad.

RWY 24: MALSR. Trees.

RWY 14-32: H4000X100 (ASPH-GRVD) S-75, D-150 MIRL
0.3% up SW

RWY 14: PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 31'. Trees.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 24	14-32	3406

AIRPORT REMARKS: Attended Apr-Oct 1200-0100Z†, Nov-Mar

1300-2300Z†. CAUTION: Deer and birds on and in vof arpt. Low altitude acft ops prohibited in vof prison 4 mi NE. When twr closed

ACTIVATE HIRL Rwy 06-24, MIRL Rwy 14-32; VASI Rwy 06, PAPI Rwy 14 and Rwy 32; REIL Rwy 32; MALSR Rwy 24—CTAF.

WEATHER DATA SOURCES: ASOS (517) 768-7506.

COMMUNICATIONS: CTAF 128.475 ATIS 125.725

UNICOM 122.95

RCO 122.2 (LANSING RADIO)

① LANSING APP/DEP CON 127.3

TOWER 128.475 (1200-0200Z†) GND CON 121.9

CLNC DEL 121.9

AIRSPACE: CLASS D svc 1200-0200Z† other times CLASS E.

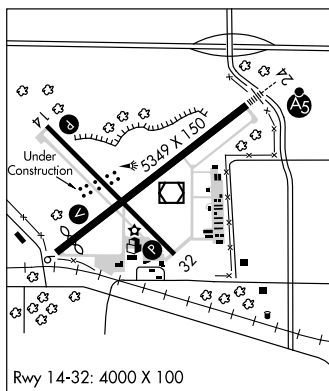
RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

(L) VORW/DME 109.6 JXN Chan 33 N42°15.55' W84°27.51' at fld. 995/5W.

VOR portion unusable 250°-310° byd 20 NM. DME portion unusable 075°-255° byd 10 NM blo 3000'.

JAKSO NDB (LOM) 212 JX N42°19.07' W84°21.93' 236° 5.5 NM to fld.

ILS 109.1 I-JXN Rwy 24 LOM JAKSO NDB. ILS and LOM unmonitored when twr clsd.

**JAKSO** N42°19.07' W84°21.93' NOTAM FILE JXN.

DETROIT

NDB (LOM) 212 JX 236° 5.5 NM to Jackson Co-Reynolds Fld. LOM unmonitored when twr clsd.

JAMES CLEMENTS MUNI (See BAY CITY)**JENISON****RIVERVIEW** (Ø8C) 3 NW UTC-5(-4DT) N42°56.15' W85°48.30'

CHICAGO

603 B FUEL 100LL NOTAM FILE LAN

L-28J

RWY 14-32: H3920X49 (ASPH) MIRL

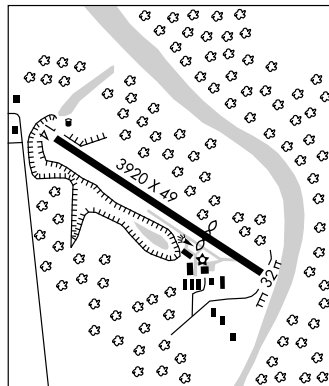
RWY 14: Trees.

RWY 32: Thld dsplcd 1196'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z†, Sat-Sun irregularly. Fuel 24 hr self serve. Deer and birds on and in vof arpt. Rwy 14-32 trees and shrubs in transition zone both sides.

ACTIVATE MIRL Rwy 14-32—CTAF.
COMMUNICATIONS: CTAF 122.9RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.
MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 144° 17.4 NM to fld. 659/1W. HIWAS.

**JERRY TYLER MEML** (See NILES)

LOC I-JXN 109.1	APP CRS 236°	Rwy Idg TDZE 999 Apt Elev 1001
---------------------------	------------------------	--

ILS or LOC RWY 24

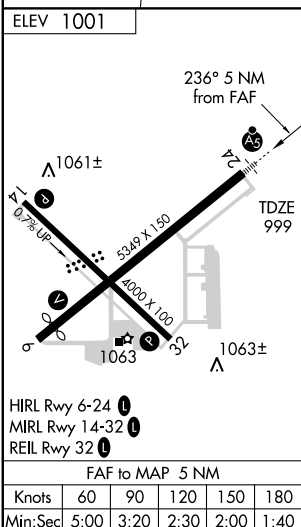
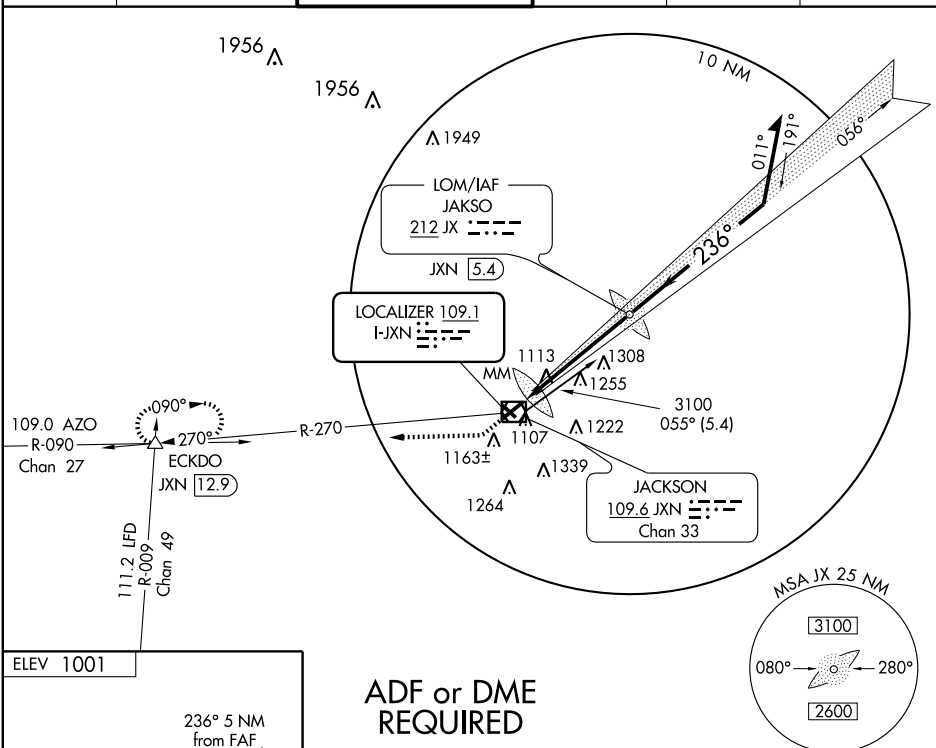
JACKSON COUNTY-REYNOLDS FIELD (JXN)

⚠ When local altimeter setting not received, use Mason altimeter setting and increase all DA 54 feet and all MDA 60 feet, increase S-LOC 24 Cat C and Circling Cat D visibility ¼ mile.



MISSED APPROACH: Climb to 1400, then climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

ATIS 125.725	LANSING APP CON 127.3 357.6	JACKSON TOWER ★ 128.475 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	-------------------------

ADF or DME
REQUIRED

1400	3000	JXN R-270	ECKDO	LOM JXN 5.4	Remain within 10 NM
2638	056°	3100	236°	2700	GS 3.00° TCH 47
0.5	4.5 NM				
CATEGORY	A	B	C	D	
S-ILS 24	1199-½ 200 (200-½)				
S-LOC 24	1440-½	441 (500-½)	1440-¾ 441 (500-¾)	1440-1 441 (500-1)	
CIRCLING	1520-1	519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)	

JACKSON, MICHIGAN

Amdt 14A 03JUN10

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

ILS or LOC RWY 24

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LOM JX	APP CRS	Rwy Idg	5349
<u>212</u>	236°	TDZE	999
		Apt Elev	1001

NDB RWY 24

JACKSON COUNTY-REYNOLDS FIELD (JXN)



MISSED APPROACH: Climbing right to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

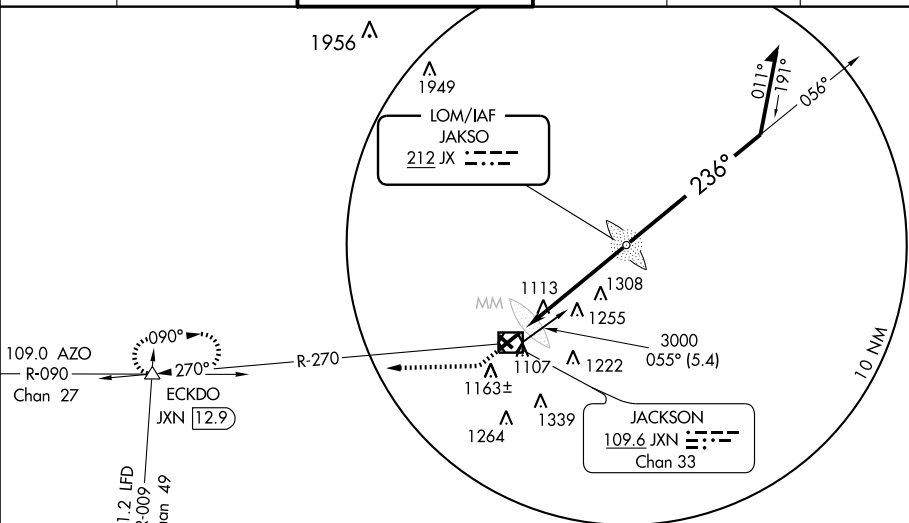
ATIS
125.725

LANSING APP CON
127.3 357.6

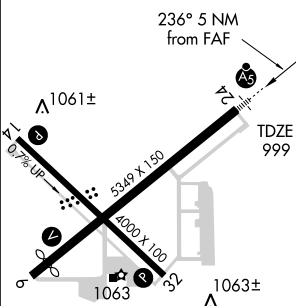
JACKSON TOWER★
128.475(CTAF) 257.8

GND CON
121.9

CLNC DE
121.9

UNICOM
122.95

ELEV 1001



HIRL Rwy 6-24 **L**
MIRL Rwy 14-32 **L**
REIL Rwy 32 **L**

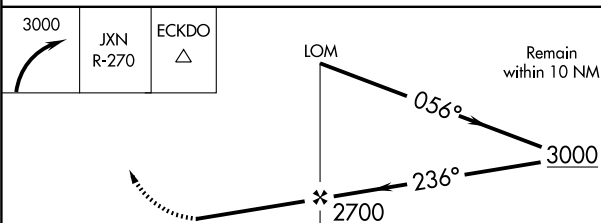
FAF to MAP 5 NM

Knots	60	90	120	150	180
-------	----	----	-----	-----	-----

Min:Sec	5:00	:
---------	------	---

JACKSON, MICHIGAN

Amdt 14 10210



CATEGORY	A	B	C	D
S-24	1660-3/4	661 (700-3/4)	1660-1 1/4 661 (700-1 1/4)	1660-1 3/4 661 (700-1 3/4)
CIRCLING	1660-1	659 (700-1)	1660-1 3/4 659 (700-1 3/4)	1660-2 659 (700-2)

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

NDB RWY 24

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

APP CRS
056°

Rwy Idg	4909
TDZE	999
Apt Elev	1001

RNAV (GPS) RWY 6

JACKSON COUNTY-REYNOLDS FIELD (JXN)

T DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When
A local altimeter setting not received, use Mason altimeter setting and increase
all MDA 60 feet, increase all Cat C/D visibilities $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 3100
direct IGLAW and hold.

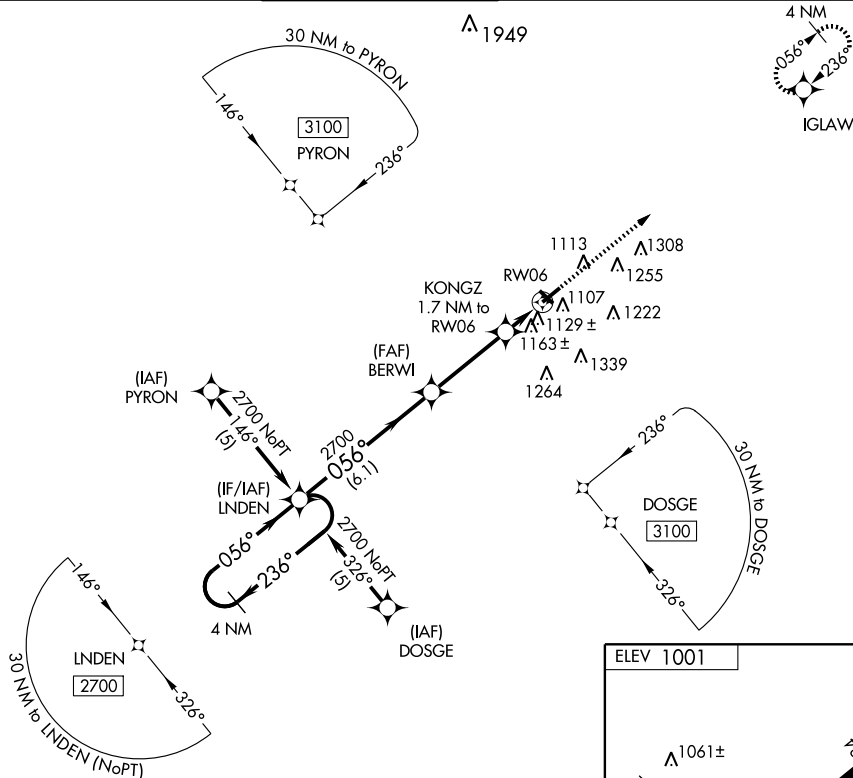
ATIS
125.725

LANSGING APP CON
127.3 357.6

JACKSON TOWER★
128.475 (CTAF) 257.8

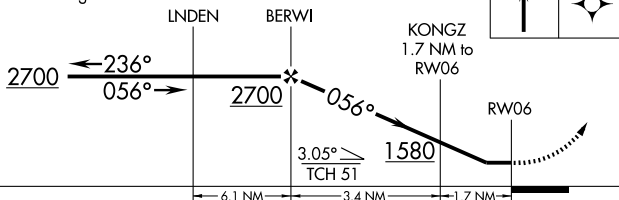
GND CON
121.9

CLNC DEL
121.9

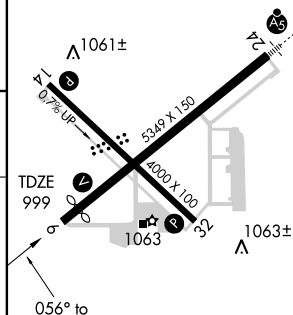
UNICOM
122.95

ELEV 1001

4 NM
Holding Pattern



3100	IGLAW
	



CATEGORY	A	B	C	D
LNAV MDA	1380-1 381 (400-1)			1380-1¼ 381 (400-1¼)
CIRCLING	1520-1 519 (600-1)		1520-1½ 519 (600-1½)	1640-2 639 (700-2)

HIRL Rwy 6-24 **L**
MIRL Rwy 14-32 **L**
REIL Rwy 32 **L**

JACKSON, MICHIGAN
Orig 22OCT09

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

RNAV (GPS) RWY 6

EC-1. 26 AUG 2010 to 23 SEP 2010

APP CRS
138°

Rwy Idg	4000
TDZE	996
Apt Elev	1001

RNAV (GPS) RWY 14

JACKSON COUNTY-REYNOLDS FIELD (JXN)

- T** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
A When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 3100
direct JERIK and hold.

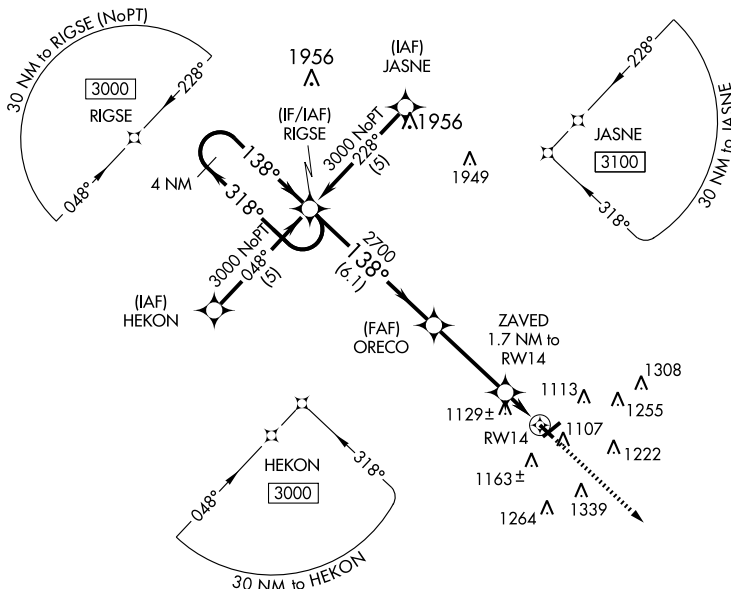
ATIS
125.725

LANSG AP CON
127.3 357.6

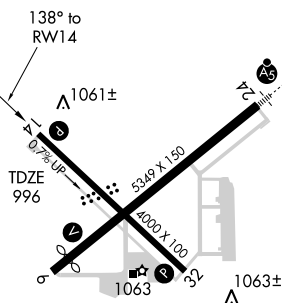
JACKSON TOWER★
128.475 (CTAF) **L** 257.8

GND CON
121.9

CLNC DEL
121,9

UNICOM
122.95

ELEV 1001



HIRL Rwy 6-24 **L**
MIRL Rwy 14-32 **L**
REIL Rwy 32 **L**

JACKSON, MICHIGAN
Orig 22OCT09

JACKSON COUNTY-REYNOLDS FIELD (JXN)

RNAV (GPS) RWY 14

42°16'N - 84°28'W

EC-1. 26 AUG 2010 to 23 SEP 2010

WAAS CH 82212 W24A	APP CRS 236°	Rwy Idg TDZE Apt Elev	5349 999 1001
--	------------------------	-----------------------------	--

RNAV (GPS) RWY 24

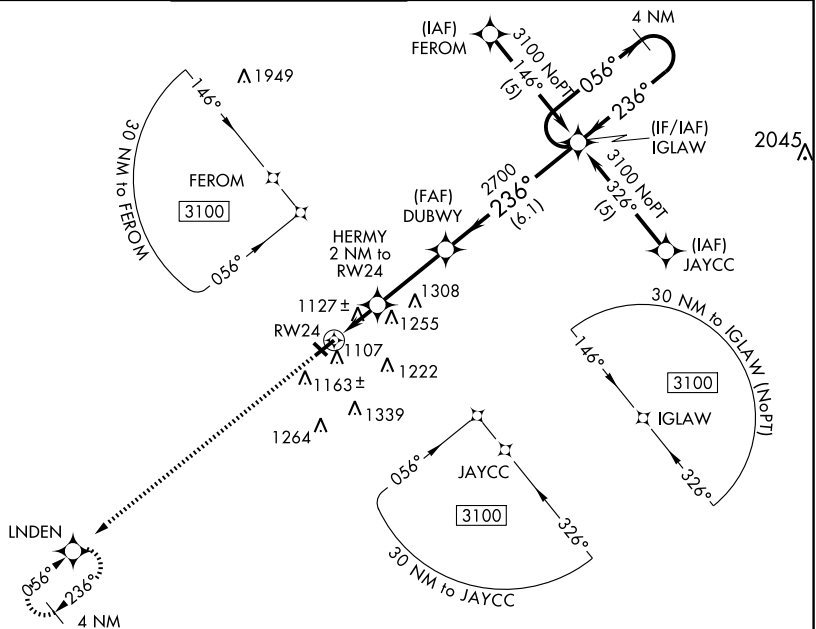
JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ Baro-VNAV NA when using Mason altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F) DME/DME RNP-0.3 NA. When local altimeter setting not received, use Mason altimeter setting and increase all DA 54 feet, all MDA 60 feet. Increase LNAV/VNAV all Cats, LNAV and circling Cat C/D visibility ¼ mile.

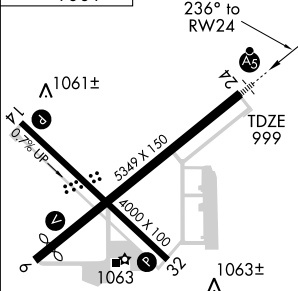


MISSED APPROACH:
Climb to 2700 direct
LNDEN and hold.

ATIS 125.725	LANSING APP CON 127.3 357.6	JACKSON TOWER ★ 128.475 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	-------------------------



ELEV 1001



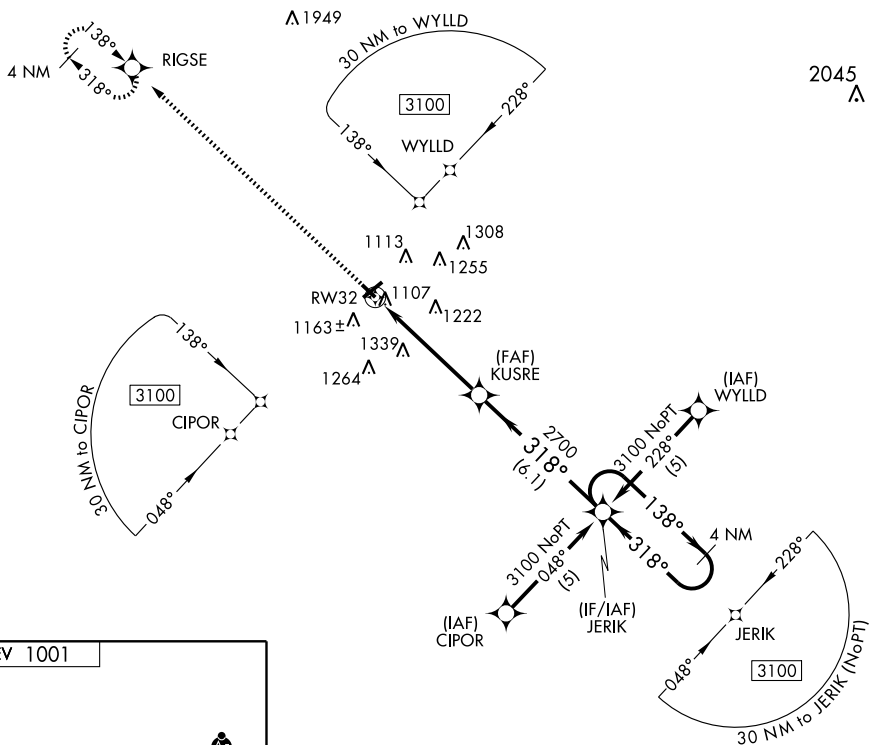
HIRL Rwy 6-24 **1**
MIRL Rwy 14-32 **1**
REIL Rwy 32 **1**

2700 LNDEN		IGLAW 4 NM Holding Pattern			
* LNAV Only		DUBWY 2700			
HERMY 2 NM to RWY 24		RWY 24 2700			
* 1660		IGLAW 2700			
2.0		3.2 NM		6.1 NM	
CATEGORY	A	B	C	D	
LPV DA	1199-½ 200 (200-½)				
LNAV/VNAV DA	1409-1 410 (500-1)				
LNAV MDA	1560-½	561 (600-½)	1560-1	561 (600-1)	1560-1¼
CIRCLING	1560-1	559 (600-1)	1560-1½	559 (600-1½)	1640-2
					639 (700-2)

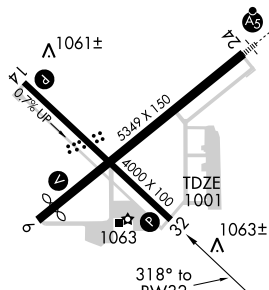
RNAV (GPS) RWY 32

JACKSON COUNTY-REYNOLDS FIELD (JXN)

MISSED APPROACH: Climb to 3000 direct RIGSE and hold.

UNICOM
122 95

ELEV 1001



3000

RIGSE

KUSRE

JERIK

4 NM Holding Pattern

138°

3100

318°

RW32

3.04°

TCH 45

2700

5.1 NM

6.1 NM

VGSi and descent angles not coincident.

CATEGORY	A	B	C	D
LNAV MDA	1560-1	559 (600-1)	1560-1½ 559 (600-1½)	1560-1¾ 559 (600-1¾)
CIRCLING	1560-1	559 (600-1)	1560-1½ 559 (600-1½)	1640-2 639 (700-2)

HIRL Rwy 6-24 **L**
MIRL Rwy 14-32 **L**
REIL Rwy 32 **L**

JACKSON, MICHIGAN
Orig 22OCT09

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

RNAV (GPS) RWY 32

EC-1. 26 AUG 2010 to 23 SEP 2010

VOR/DME JXN 109.6 Chan 33	APP CRS 231°	Rwy Idg TDZE Apt Elev 5349 999 1001
---	------------------------	---

VOR/DME RWY 24

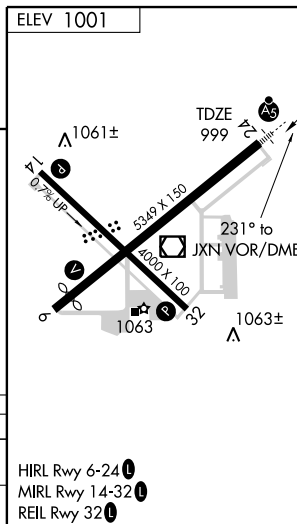
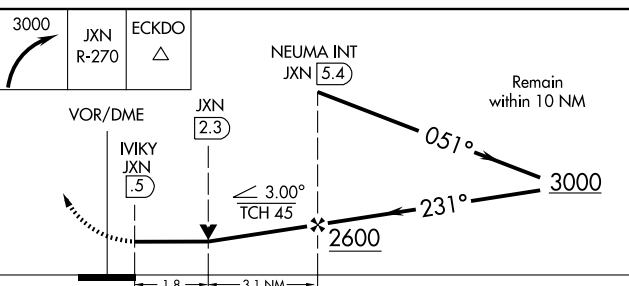
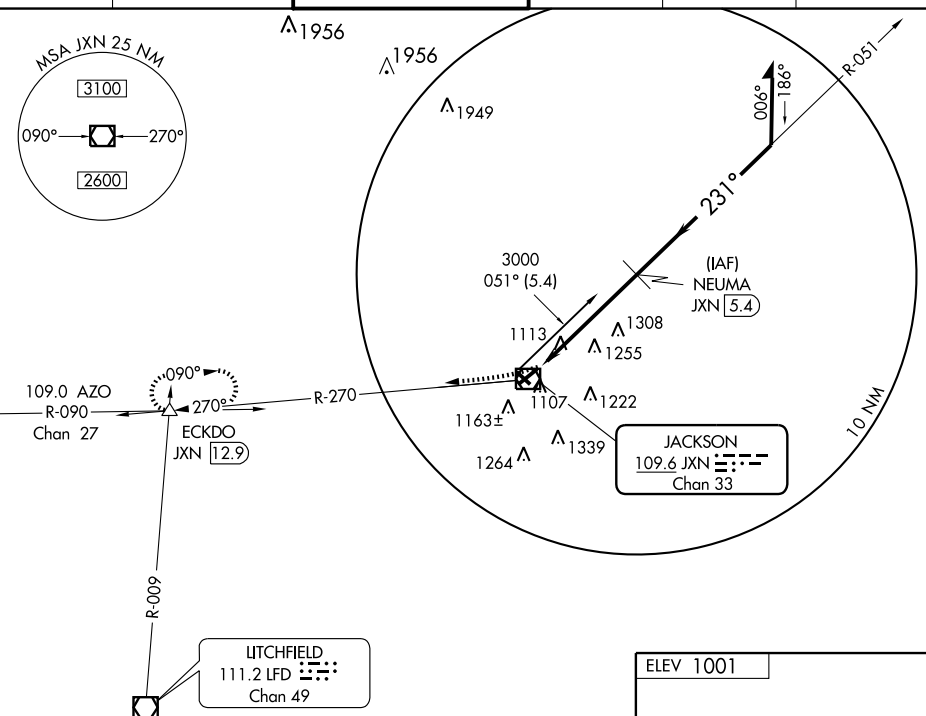
JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile. VDP NA when using Mason altimeter setting.



MISSED APPROACH: Climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

ATIS 125.725	LANSING APP CON 127.3 357.6	JACKSON TOWER ★ 128.475 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	-------------------------



CATEGORY	A	B	C	D
S-24	1620-½ 621 (700-½)		1620-1¼ 621 (700-1¼)	1620-1½ 621 (700-1)
CIRCLING	1620-1 619 (700-1)		1620-1¾ 619 (700-1¾)	1640-2 639 (700-2)

VOR/DME JXN 109.6 Chan 33	APP CRS 062°	Rwy Idg TDZE 999 Apt Elev 1001
---	------------------------	--

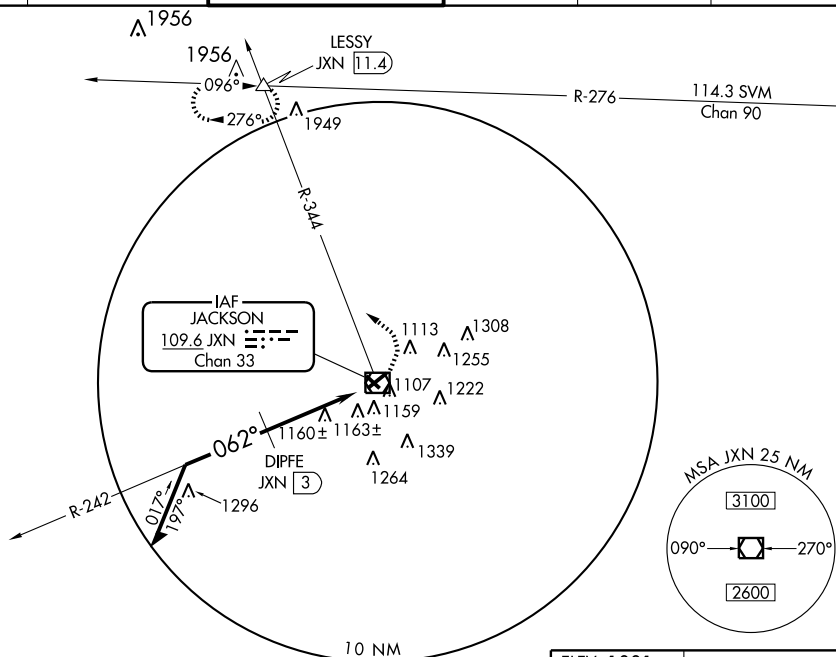
VOR RWY 6

JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet. Increase all Cat C/D visibilities ¼ mile.

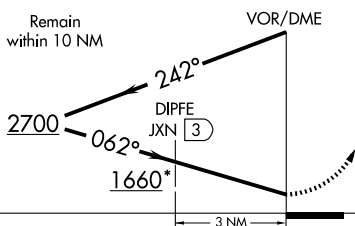
MISSED APPROACH: Climbing left turn to 3000 via JXN R-344 to LESSY Int/JXN 11.4 DME and hold.

ATIS 125.725	LANSING APP CON 127.3 357.6	JACKSON TOWER ★ 128.475 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	--------------------------	-------------------------



ELEV 1001

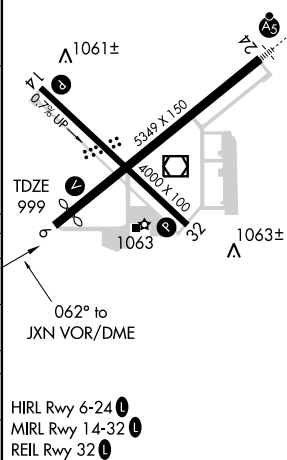
Remain within 10 NM



3000	JXN R-344	LESSY △
------	--------------	------------

*1720 when using Mason altimeter setting.

CATEGORY	A	B	C	D
S-6	1660-1	661 (700-1)	1660-1¾ 661 (700-1¾)	1660-2 661 (700-2)
CIRCLING	1660-1	659 (700-1)	1660-1¾ 659 (700-1¾)	1660-2 659 (700-2)
DIPFE MINIMUMS				
S-6	1460-1	461 (500-1)	1460-1¼ 461 (500-1¼)	1460-1½ 461 (500-1½)
CIRCLING	1520-1	519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)



HIRL Rwy 6-24 ①
MIRL Rwy 14-32 ①
REIL Rwy 32 ①

VOR/DME JXN 109.6 Chan 33	APP CRS 133°	Rwy Idg 4000 TDZE 996 Apt Elev 1001
---	------------------------	--

VOR RWY 14

JACKSON COUNTY-REYNOLDS FIELD (JXN)

T Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities $\frac{1}{4}$ mile.

MISSED APPROACH: Climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

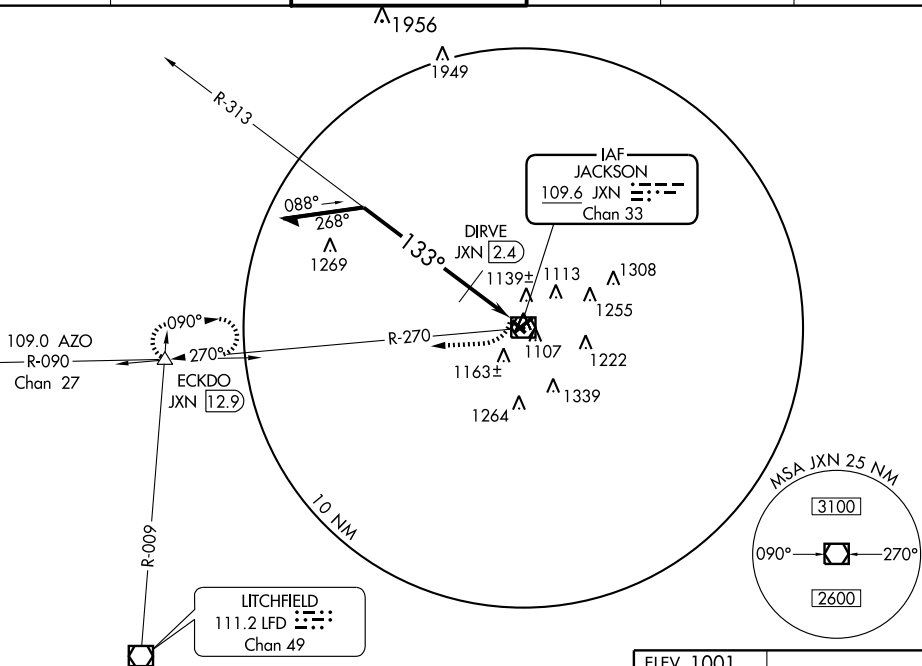
ATIS
125.725

LANSGING APP CON
127.3 357.6

JACKSON TOWER★
128.475(CTAF) 257.8

GND CON
121.9

CLNC DEL
121.9

UNICOM
122.95

Remain
within 10 NM

VOR/DME

6000

within 10 NM

313°

2700

133°

DIRVE JXN [2.4]

1580°

2.78°

TCH 45

3000

8348

ECKDO

ELEV 1001

VGSI and descent angles not coincident.

*1640 when using Mason altimeter setting.

133° to JXN
VOR/DME

104

10613

0.7% Util

TDZE
996



1086 +

$$\Delta^{1000} =$$

HPI Page 6-2

MIRL Rwy 14-

REIL Rwy 32L

COUNTY-REY

CATEGORY	A	B	C	D
S-14	1580-1	584 (600-1)	1580-1½ 584 (600-1½)	1580-1¾ 584 (600-1¾)
CIRCLING	1580-1	579 (600-1)	1580-1½ 579 (600-1½)	1640-2 639 (700-2)
DIRVE MINIMUMS				
S-14	1400-1	404 (400-1)	1400-1¼	404 (400-1¼)
CIRCLING	1520-1	519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)

JACKSON, MICHIGAN

Amdt 20 22OCT09

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

VOR RWY 14

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

VOR/DME JXN
109.6
Chan **33**

APP CRS
325°

Rwy Idg
TDZE
Apt Elev
4000
1001
1001

VOR RWY 32

JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 3000 via JXN
R-344 to LESSY Int/JXN 11.4 DME and hold.

ATIS
125.725

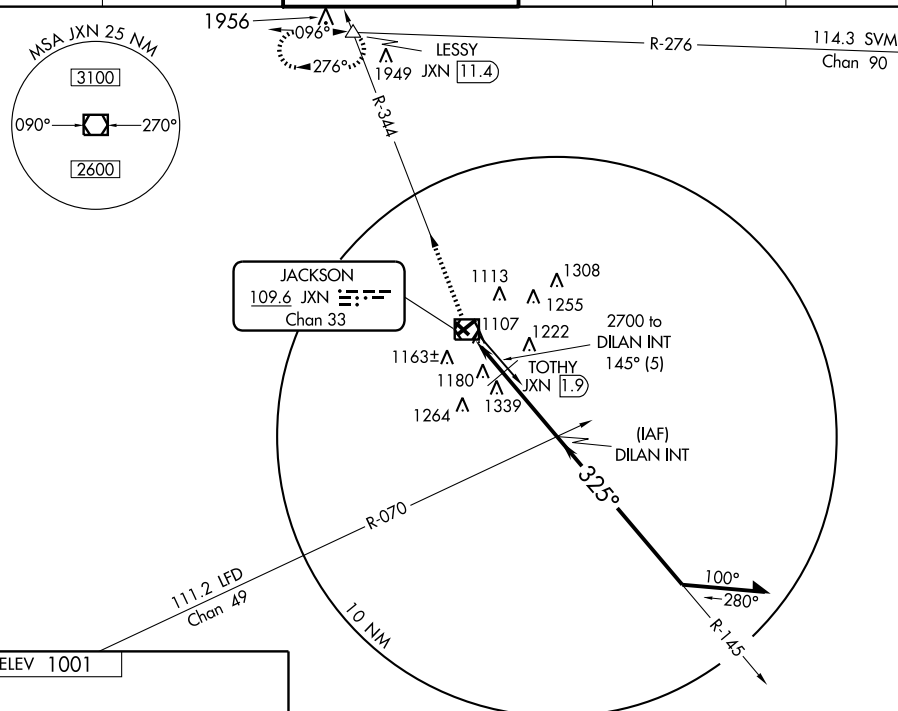
LANSING APP CON
127.3 357.6

JACKSON TOWER ★
128.475 (CTAF) 257.8

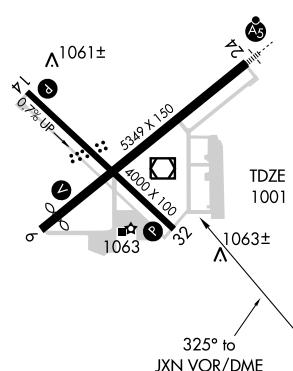
GND CON
121.9

CLNC DEL
121.9

UNICOM
122.95



ELEV 1001



HIRL Rwy 6-24 (1061±)
MRL Rwy 14-32 (1063±)
REL Rwy 32 (1063±)

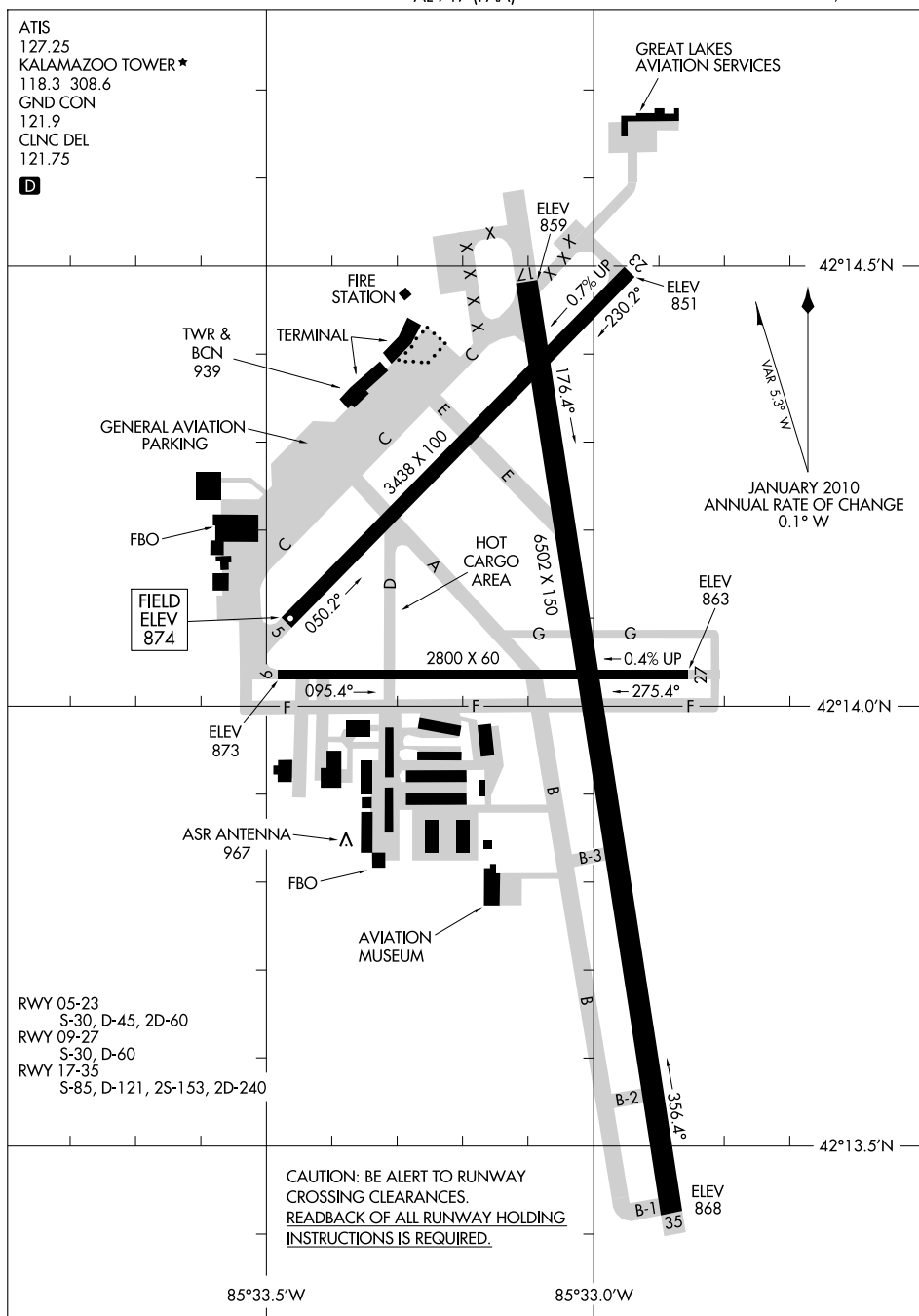
3000	JXN R-344	LESSY	TOTHY JXN 1.9	DILAN INT	Remain within 10 NM
			VOR/DME	325°	2700
			1600*	3.04° TCH 45	2600
			1.7	3.1 NM	
CATEGORY	A	B	C	D	
S-32	1600-1	599 (600-1)	1600-1½ 599 (600-1½)	1600-1¾ 599 (600-1¾)	
CIRCLING	1600-1	599 (600-1)	1600-1½ 599 (600-1½)	1640-2 639 (700-2)	
TOTHY MINIMUMS					
S-32	1460-1	459 (500-1)	1460-1¼ 459 (500-1¼)	1460-1½ 459 (500-1½)	
CIRCLING	1520-1	519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)	

AIRPORT DIAGRAM

AL-717 (FAA)

KALAMAZOO/ BATTLE CREEK INTL (AZO)
KALAMAZOO, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

KALAMAZOO, MICHIGAN
KALAMAZOO/ BATTLE CREEK INTL (AZO)

KALAMAZOO

KALAMAZOO/BATTLE CREEK INTL (AZO) 3 SE UTC-5(-4DT) N42°14.06' W85°33.09'

CHICAGO

874 B S4 FUEL 100LL, JET A OX 1, 3 TPA-1674(800) NOTAM FILE AZO

H-5E, 10F, L-281

LRA Class I, ARFF Index B

IAP, AD

RWY 17-35: H6502X150 (ASPH-GRVD) S-85, D-121, 2S-153, 2D-240 HIRL

RWY 17: REIL. PAPI(P4L)—TCH 45'. Trees.

RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 53'. Railroad.

RWY 05-23: H3438X100 (ASPH-GRVD) S-30, D-45, 2D-60 MIRL 0.7% up SW

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 28'. Pole.

RWY 23: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Tree.

RWY 09-27: H2800X60 (ASPH) S-30, D-60 MIRL 0.4% up W RWY 09: Tree.

RWY 27: Railroad.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

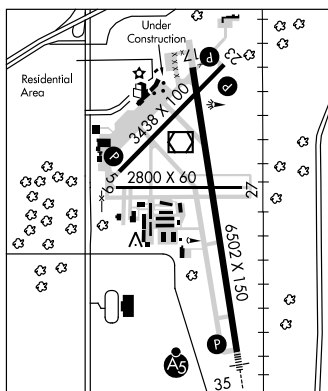
RWY 09: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 17: TORA-6502 TODA-6502 ASDA-6502 LDA-6502

RWY 23: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

RWY 27: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 35: TORA-6502 TODA-6502 ASDA-6502 LDA-6502



AIRPORT REMARKS: Attended continuously. Rwy 05-23 avbl for air

carrier twy only and Rwy 09-27 not avbl for air carrier ops with more than 10 passenger seats. Migratory water fowl roosting area 5500' apch end Rwy 35. Birds on and in/ovf arpt. PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 269-388-3668. Rwy 09 and Rwy 05 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd ACTIVATE HIRL Rwy 17-35, MIRL Rwy 05-23 and Rwy 09-27; MALSR Rwy 35; PAPI Rwy 05, Rwy 23, Rwy 17, and Rwy 35; REIL Rwy 05, Rwy 23 and Rwy 17—CTAF. FAR PART 36 noise limits in effect 0400-1130Z†. For customs call 269-965-3349.

Twys F and G east of Rwy 17-35 restricted acft less than 12,500 lbs.

WEATHER DATA SOURCES: ASOS (269) 384-5729. LAWRs.

COMMUNICATIONS: CTAF 118.3 ATIS 127.25 UNICOM 122.95

RCO 122.1R 109.0T (LANSING RADIO)

(R) APP/DEP CON 121.2 (175°-353°) 119.2 (354°-174°) 123.8 (1100-0400Z†)

(R) CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

TOWER 118.3 (1100-0400Z†) GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS D svc 1100-0400Z† other times CLASS G.

TRSA svc etc APP CON

RAIDIO AIDS TO NAVIGATION: NOTAM FILE AZO.

(L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' at fld. 870/1W.

DME portion unusable byd 35 NM blo 2500'.

AUSTN NDB (LOM) 371 AZ N42°07.86' W85°31.79' 354° 6.3 NM to fld. Unmonitored when twr clsd.

ILS 110.9 I-AZO Rwy 35. LOM AUSTN NDB. LOC BC unusable byd 10° left and right of course. LOC BC unusable byd 10 NM. LOC and GS unmonitored when twr closed.

ASR (1100-0400Z†)

NEWMAN'S (4NØ) 7 W UTC-5(-4DT) N42°17.34' W85°45.00'

CHICAGO

840 NOTAM FILE LAN

RWY 18-36: 2697X125 (TURF) LIRL

RWY 18: Thld dspld 191'. Trees.

RWY 36: Thld dspld 385'. Tree.

AIRPORT REMARKS: Attended irregularly. Deer in/ovf rwy. Rwy 18-36 and dspld thlds marked with 3' yellow cones.

ACTIVATE LIRL Rwy 18-36-122.9.

COMMUNICATIONS: CTAF: 122.9

KALKASKA CITY (Y89) 1 SW UTC-5(-4DT) N44°43.51' W85°12.19'

GREEN BAY

1030 NOTAM FILE LAN

RWY 10-28: H3500X75 (ASPH) MIRL

RWY 10: PAPI(P2L)—GA 3.0° TCH 24'. Trees.

RWY 28: PAPI(P2L)—GA 4.0° TCH 32'. Trees.

AIRPORT REMARKS: Unattended. Deer and birds on and in/ovf arpt. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28—CTAF.

COMMUNICATIONS: CTAF 122.9

RAIDIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 079° 15.2 NM to fld. 912/2W. HIWAS

L-31B

APP CRS	Rwy Idg	3438
049°	TDZE	874
	Apt Elev	874

GPS RWY 5

KALAMAZOO/BATTLE CREEK INTL (AZO)

T When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 120 feet, increase S-5 and Circling Cat C visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 2500 direct BIGUM WP and hold.

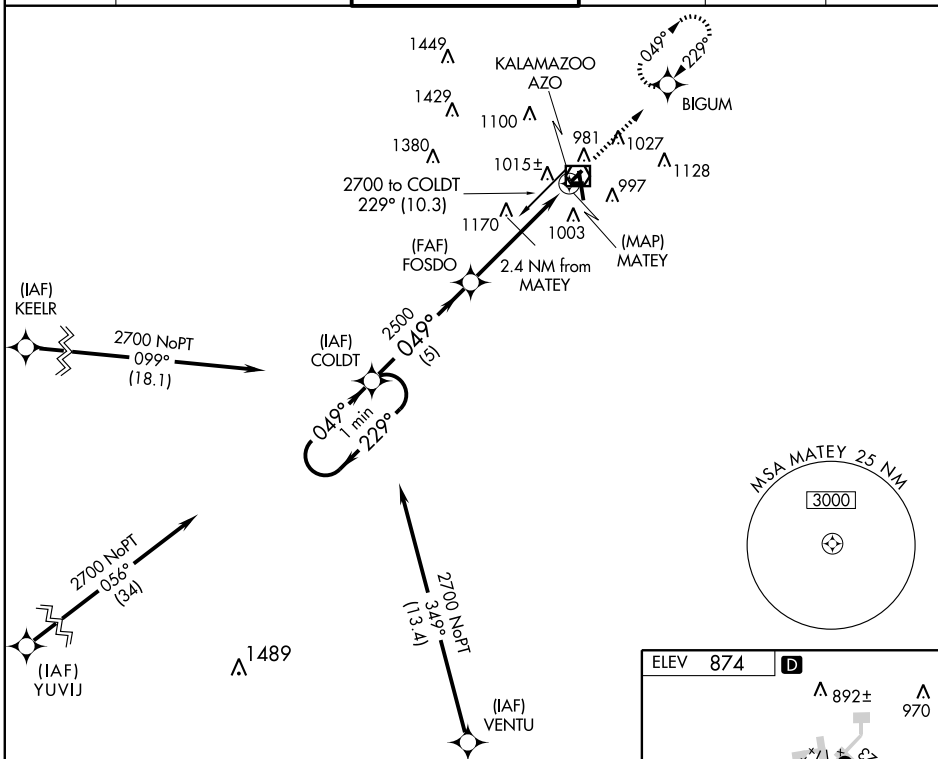
ATIS
127.25

KALAMAZOO APP CON ★
121.2 340.9

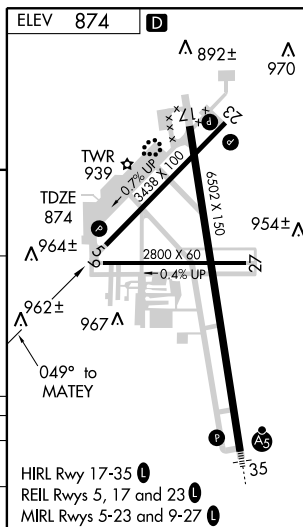
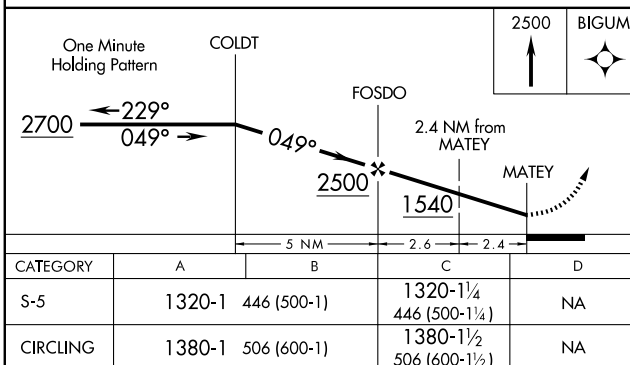
KALAMAZOO TOWER★
118.3 (CTAF) **L** 308.6

GND CON
121.9

CLNC DEL
121,75

UNICOM
122.95

EC-1. 26 AUG 2010 to 23 SEP 2010



KALAMAZOO, MICHIGAN
Orig-A 10210

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)

GPS RWY 5

APP CRS **217°**
Rwy Idg **3438**
TDZE **874**
Apt Elev **874**

GPS RWY 23

KALAMAZOO/BATTLE CREEK INTL (AZO)



NA
ASR

When local altimeter not received,
use Grand Rapids altimeter setting.

MISSED APPROACH: Climb to 2200
direct DAGGU WP and hold.

ATIS
127.25

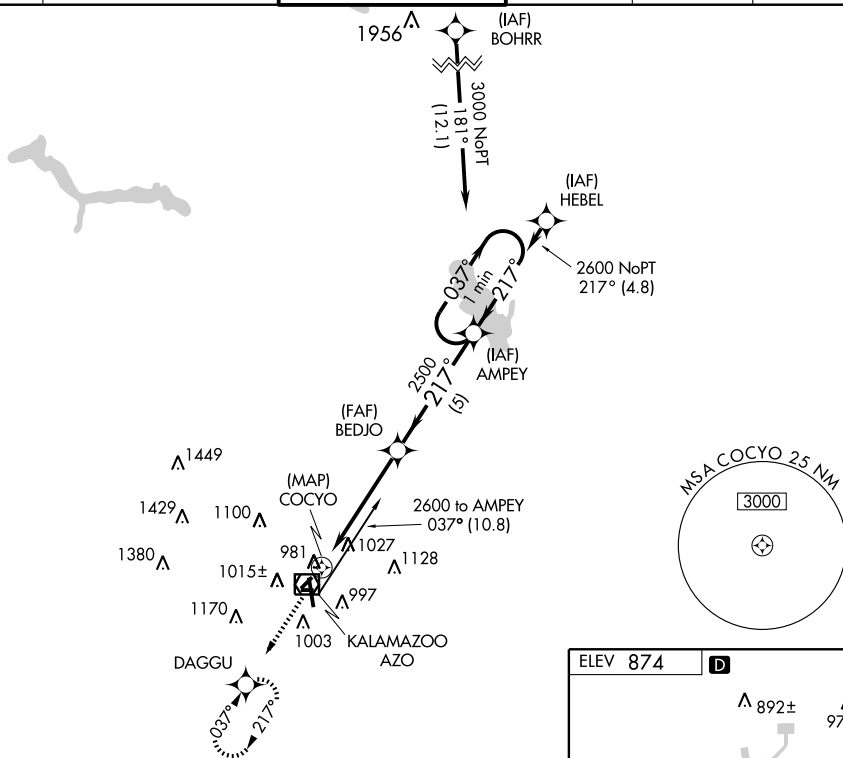
KALAMAZOO APP CON ★
121.2 340.9

KALAMAZOO TOWER ★
118.3 (CTAF) 308.6

GND CON
121.9

CLNC DEL
121.75

UNICOM
122.95



2200 DAGGU

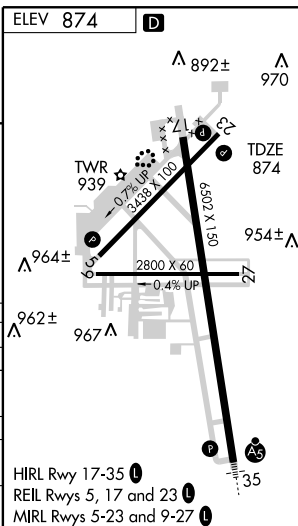
COCYO BEDJO AMPEY One Minute Holding Pattern
2500 217° 037° 2600
217°

0.5 5 NM 5 NM

CATEGORY	A	B	C	D
S-23	1300-1	426 (500-1)	1300-1½	426 (500-1½)
CIRCLING	1380-1	506 (600-1)	1380-1½	1440-2
			506 (600-1½)	566 (600-2)

GRAND RAPIDS ALTIMETER SETTING MINIMUMS

S-23	1400-1	526 (600-1)	1400-1½	526 (600-1½)	1400-1¾	526 (600-1¾)
CIRCLING	1480-1	606 (700-1)	1480-1¾	606 (700-1¾)	1480-2	606 (700-2)



HIRL Rwy 17-35
REIL Rws 5, 17 and 23
MIRL Rws 5-23 and 9-27

LOC I-AZO	APP CRS	Rwy Idg	6502
<u>110.9</u>	354°	TDZE	868
		Apt Elev	874

ILS or LOC RWY 35
KALAMAZOO/BATTLE CREEK INTL (AZO)

T
A
ASR

* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 2600 via AZO VOR/DME R-353 to UPJON INT/AZO 5.6 DME and hold.

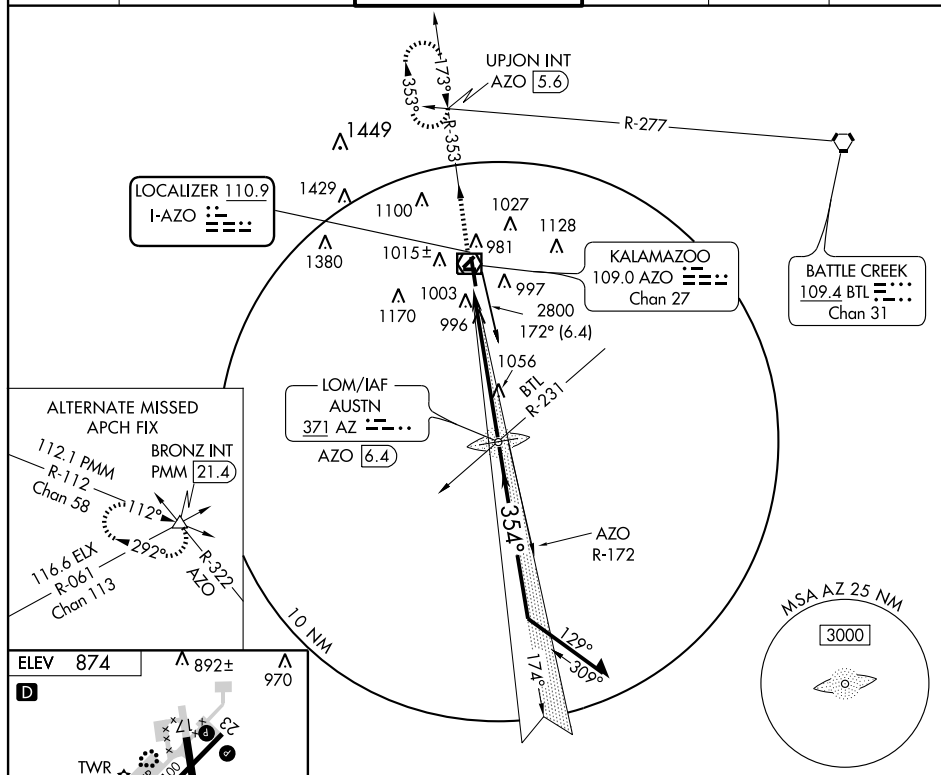
ATIS
127,25

KALAMAZOO APP CON ★
121.2 340.9

KALAMAZOO TOWER★
118.3 (CTAF) **L** 308.6

GND CON
121.9

CLNC DEB
121,75

UNICOM
122.95

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

CATEGORY	A	B	C	D
S-ILS 35	*1068/24		200 (200-½)	
S-LOC 35	1320/24	452 (500-½)	1320/40 452 (500-¾)	1320/50 452 (500-1)
CIRCLING	1380-1	506 (600-1)	1380-1½ 506 (600-1½)	1440-2 566 (600-2)

KALAMAZOO, MICHIGAN
Amdt 22B 03JUN10

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)
ILS or LOC RWY 35



EC-1. 26 AUG 2010 to 23 SEP 2010

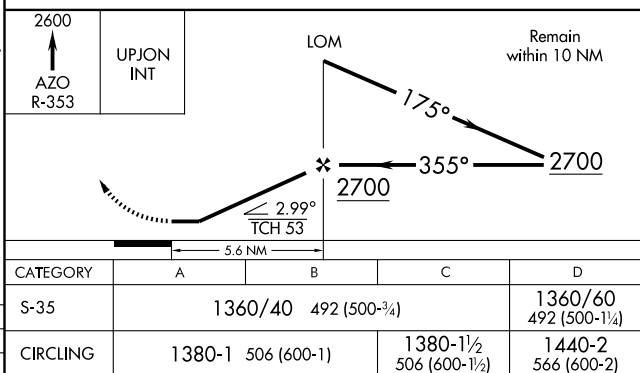
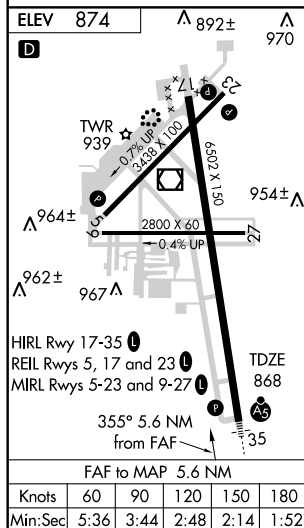
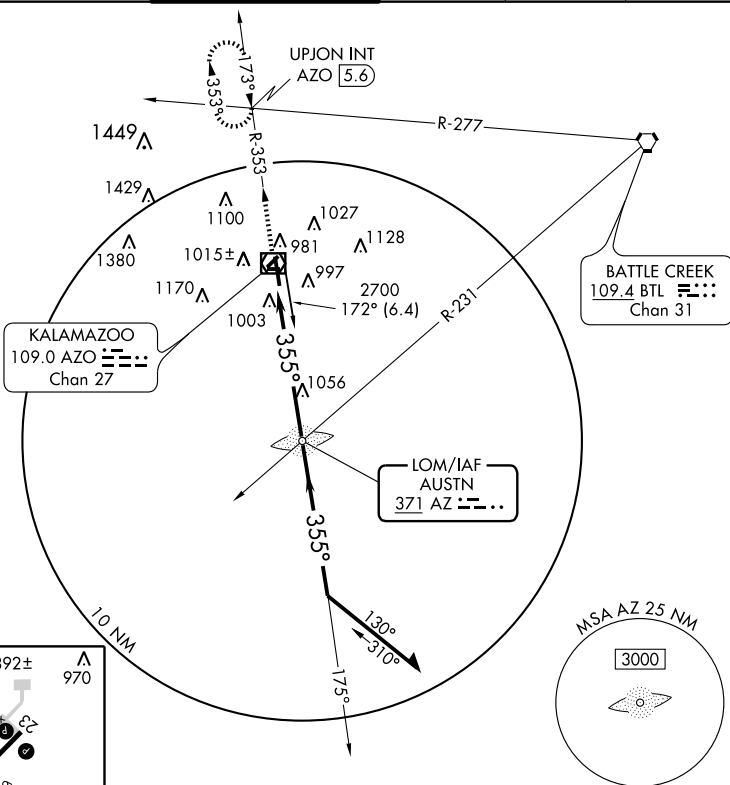
EC-1, 26 AUG 2010 to 23 SEP 2010

LOM AZ 371	APP CRS 355°	Rwy Idg TDZE Apt Elev	6502 868 874
----------------------	------------------------	-----------------------------	---

NDB RWY 35

KALAMAZOO/BATTLE CREEK INTL (AZO)

 ASR		MALSR 	MISSED APPROACH: Climb to 2600 via AZO VOR/DME R-353 to UPJON Int/AZO 5.6 DME and hold.		
ATIS 127.25	KALAMAZOO APP CON★ 121.2 340.9	KALAMAZOO TOWER★ 118.3 (CTAF) 308.6	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95

**NDB RWY 35**

APP CRS	Rwy Idg	6502
174°	TDZE	867
	Apt Elev	874

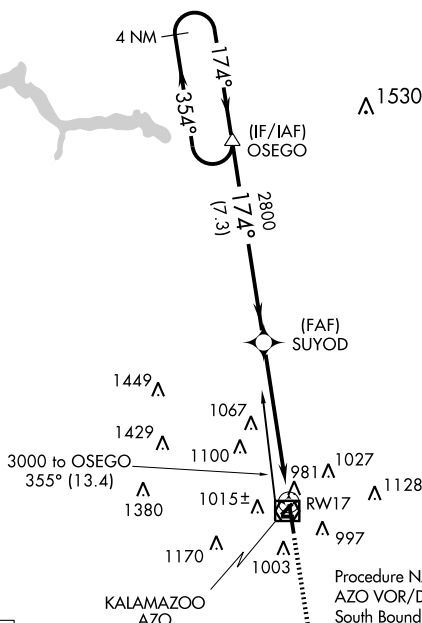
RNAV (GPS) RWY 17

KALAMAZOO/BATTLE CREEK INTL (AZO)

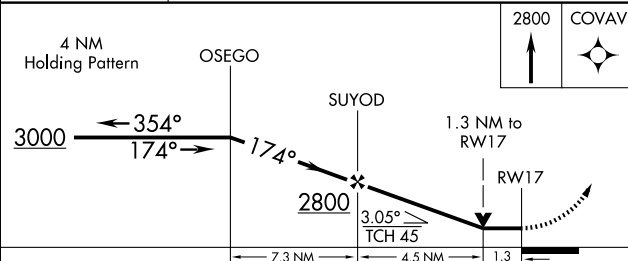
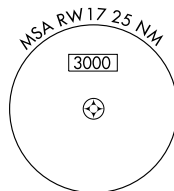
ASR DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to
2800 direct COVAV and hold.

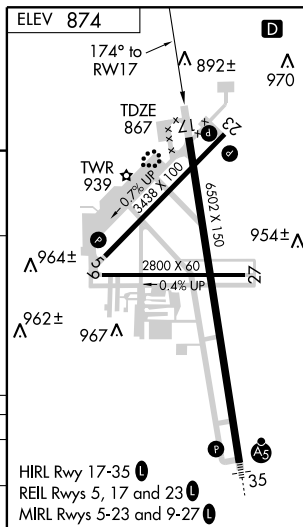
ATIS 127.25	KALAMAZOO APP CON ★ 121.2 340.9	KALAMAZOO TOWER ★ 118.3 (CTAF) 308.6	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---	--	-------------------------	---------------------------	-------------------------



MISSED APCH FIX
COVAV



CATEGORY	A	B	C	D
LNNAV MDA	1320-1	453 (500-1)	1320-1½ 453 (500-1½)	1320-1½ 453 (500-1½)
CIRCLING	1380-1	506 (600-1)	1380-1½ 506 (600-1½)	1440-2 566 (700-2)



WAAS CH 61102 W35A	APP CRS 354°	Rwy Idg 6502 TDZE 868 Apt Elev 874
--	------------------------	---

RNAV (GPS) RWY 35

KALAMAZOO/BATTLE CREEK INTL (AZO)

ASR For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 49°C (121°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 3000 direct OSEGO and hold.

ATIS
127.25

KALAMAZOO APP CON ★
121.2 340.9

KALAMAZOO TOWER ★
118.3 (CTAF) **L** 308.6

GND CON
121.9

CLNC DEL
121.75UNICOM
122.95

MISSED APCH FIX

Diagram illustrating the structure of the OSEGO molecule, showing a 4 nm length, a 174° angle, and a 354° angle.

Procedure NA for arrivals
on AZO VOR/DME airway
radials 192 CW 232.

(FAF)
EYOLU

(COV.

2800 NoPT
349° (6)

(IAF)
YURUD

ELEV 874	D $\Delta_{892\pm}$	Δ_{970}
----------	----------------------------	----------------

Diagram illustrating a 3000m holding pattern for RW35. The pattern is defined by a series of turns around a fix. Key dimensions and labels include:

- 3000 (Pattern Altitude)
- RW35 (Runway)
- 1.1 NM to RW35 (Distance to runway)
- 4.7 NM (Distance between turns)
- 6 NM (Distance between turns)
- 1.1 NM (Radius of turn)
- 354° (Turn angle)
- 174° (Turn angle)
- 2800 (Pattern Altitude)
- GS 2.98° TCH 53 (Glide Slope and Threshold Crossing Height)

KALAMAZOO, MICHIGAN
Orig 10210

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)
RNAV (GPS) RWY 35

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME AZO 109.0 Chan 27	APP CRS 050°	Rwy Idg 3438 TDZE 874 Apt Elev 874
---	------------------------	---

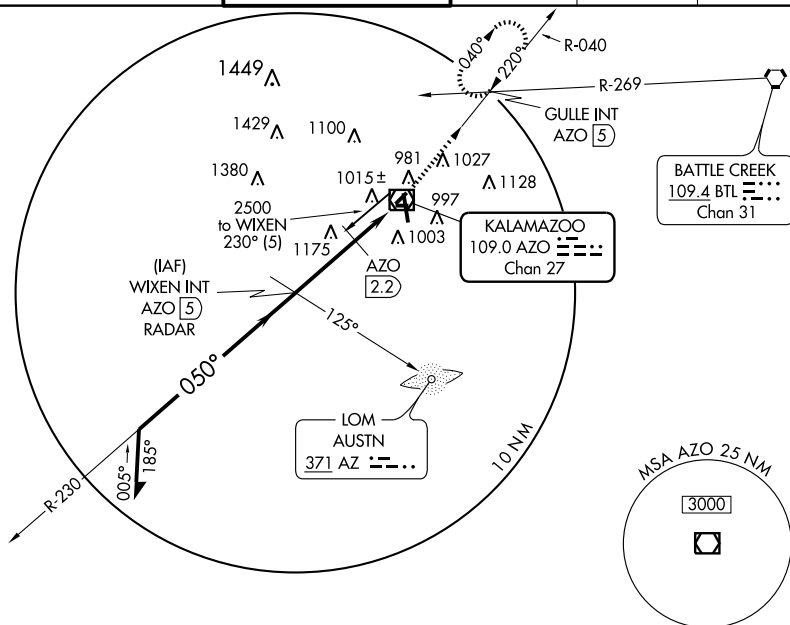
VOR RWY 5

KALAMAZOO/BATTLE CREEK INTL (AZO)

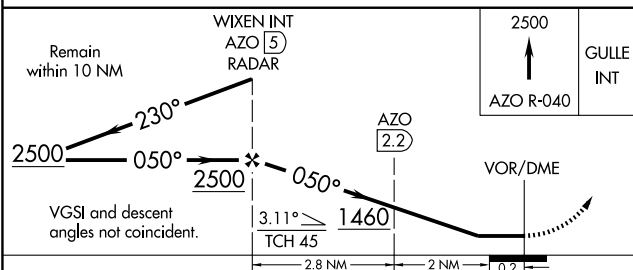
ASR When control tower closed, procedure not authorized.

MISSED APPROACH: Climb to 2500 via AZO
R-040 to GULLE Int/AZO 5 DME and hold.

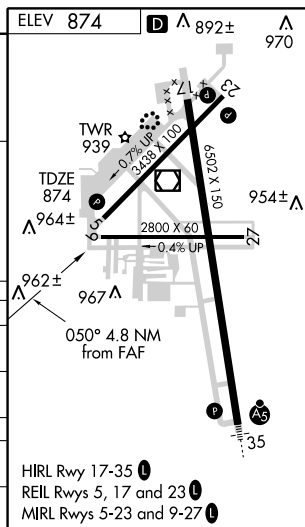
ATIS 127.25	KALAMAZOO APP CON ★ 121.2 340.9	KALAMAZOO TOWER ★ 118.3 (CTAF) 308.6	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---	--	-------------------------	---------------------------	-------------------------



DME, ADF or AZO ASR REQUIRED



CATEGORY	A	B	C	D
S-5	1460-1	586 (600-1)	1460-1½ 586 (600-1½)	NA
CIRCLING	1460-1	586 (600-1)	1460-1½ 586 (600-1½)	NA
DME MINIMUMS				
S-5	1340-1	466 (500-1)	1340-1¼ 466 (500-1¼)	NA
CIRCLING	1340-1	466 (500-1)	1340-1½ 466 (500-1½)	NA



VOR/DME AZO 109.0 Chan 27	APP CRS 180°	Rwy Idg TDZE Apt Elev	6502 867 874
---	------------------------	-----------------------------	---

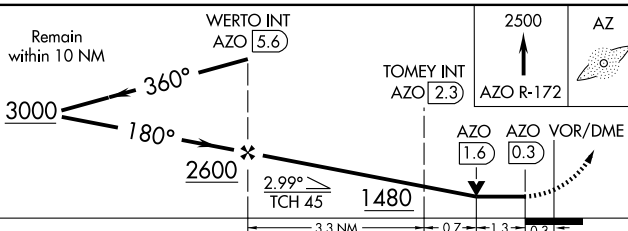
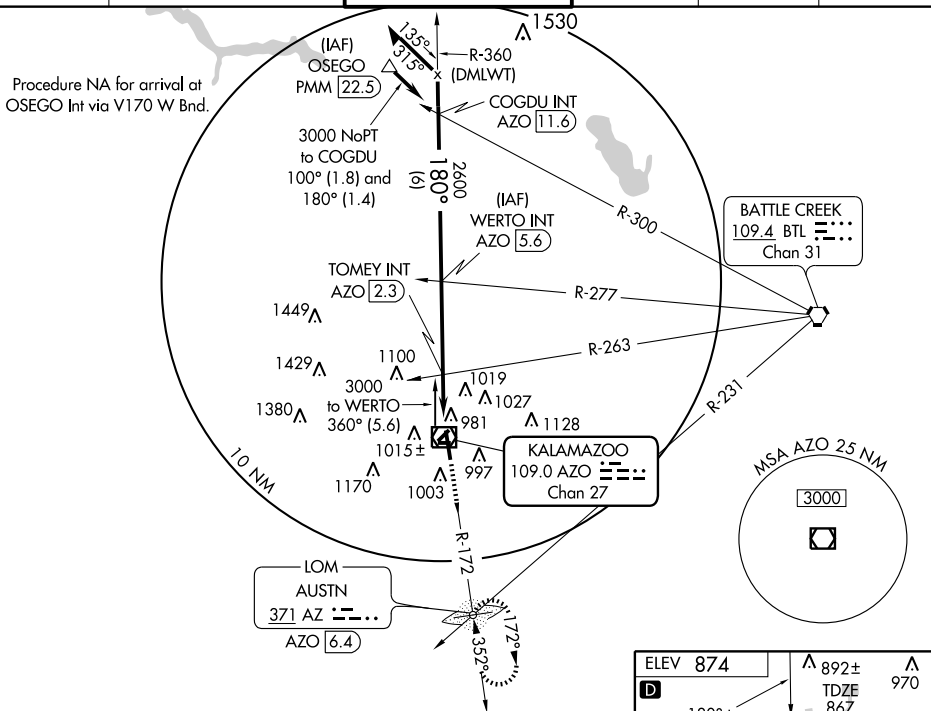
VOR RWY 17

KALAMAZOO/BATTLE CREEK INTL (AZO)

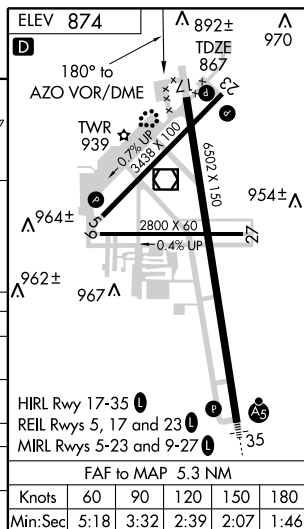
ASR Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 via AZO R-172 to AUSTN LOM/Int/AZO 6.4 DME and hold.

ATIS 127.25	KALAMAZOO APP CON ★ 121.2 340.9	KALAMAZOO TOWER ★ 118.3 (CTAF) 308.6	GND CON 121.9	CLNC DEL 121.75	UNICOM 122.95
-----------------------	---	--	-------------------------	---------------------------	-------------------------



CATEGORY	A	B	C	D
S-17	1480-1	613 (700-1)	1480-1 3/4 613 (700-1 3/4)	1480-2 613 (700-2)
CIRCLING	1480-1	606 (700-1)	1480-1 3/4 606 (700-1 3/4)	1480-2 606 (700-2)
TOMEY FIX MINIMUMS				
S-17	1320-1	453 (500-1)	1320-1 1/4 453 (500-1 1/4)	1320-1 1/2 453 (500-1 1/2)
CIRCLING	1380-1	506 (600-1)	1380-1 1/2 506 (600-1 1/2)	1440-2 566 (600-2)



VOR/DME AZO
109.0
 Chan **27**

APP CRS
220°

Rwy Idg **3438**
 TDZE **873**
 Apt Elev **874**

VOR RWY 23

KALAMAZOO/BATTLE CREEK INTL (AZO)

ASR When Control Tower closed, except for operators with approved weather reporting service, use South Bend altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via AZO R-172 to AUSTN LOM/Int/AZO 6.4 DME and hold.

ATIS
127.25

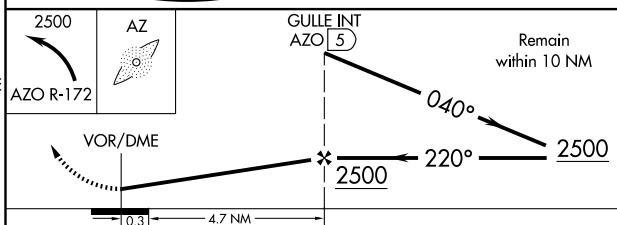
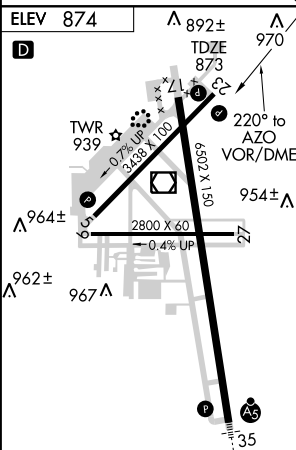
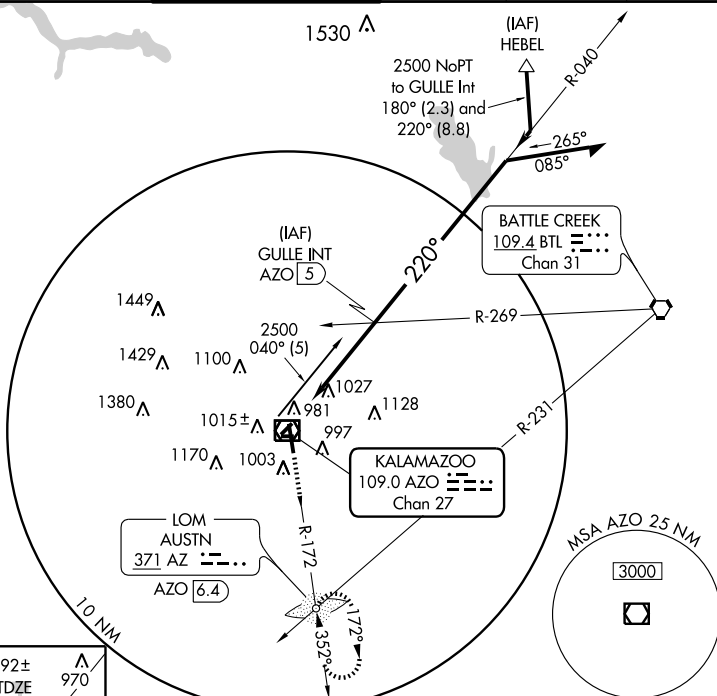
KALAMAZOO APP CON ★
121.2 340.9

KALAMAZOO TOWER ★
118.3 (CTAF) 308.6

GND CON
121.9

CLNC DEL
121.75

UNICOM
122.95



CATEGORY	A	B	C	D
S-23	1300-1	427 (500-1)	1300-1½ 427 (500-1½)	1300-1½ 427 (500-1½)
CIRCLING	1320-1 446 (500-1)	1340-1 466 (500-1)	1340-1½ 466 (500-1½)	1440-2 566 (600-2)
SOUTH BEND ALTIMETER SETTING MINIMUMS				
S-23	1520-1	647 (700-1)	1520-1¾ 647 (700-1¾)	1520-2 647 (700-2)
CIRCLING	1540-1	666 (700-1)	1560-2 686 (700-2)	1640-2½ 766 (800-2½)

VOR/DME AZO
109.0
 Chan **27**

APP CRS
347°

Rwy ldg **6502**
 TDZE **868**
 Apt Elev **874**

VOR RWY 35

KALAMAZOO/BATTLE CREEK INTL (AZO)

ASR For inoperative MALS, increase S-35 Cat A and B visibility to RVR 5000.

MALS

MISSED APPROACH: Climb to 2600 via AZO R-353 to UPJON Int/AZO 5.6 DME and hold.

ATIS
127.25

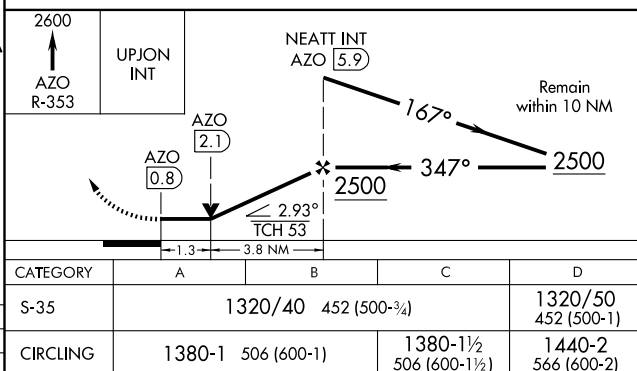
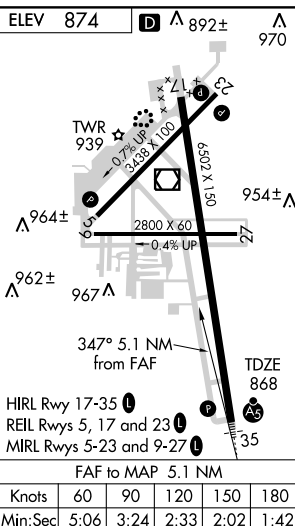
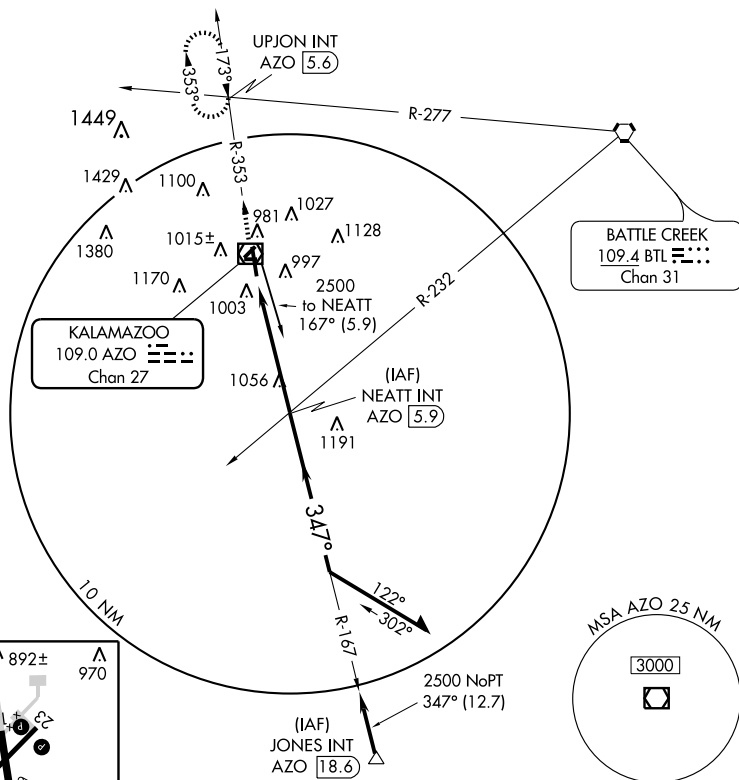
KALAMAZOO APP CON ★
121.2 340.9

KALAMAZOO TOWER ★
118.3 (CTAF) 308.6

GND CON
121.9

CLNC DEL
121.75

UNICOM
122.95



LAKEVIEW ARPT—GRIFFITH FLD (13C) 1 NE UTC-5(-4DT) N43°27.13' W85°15.89'

CHICAGO

969 B S4 FUEL 100LL NOTAM FILE LAN

L-28J

RWY 09-27: H3500X75 (ASPH) S-12 MIRL

IAP

RWY 09: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P2L)-GA 3.0° TCH 50'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. For service after hrs call assistant arpt manager on 616-527-0915. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and 27—CTAF. Agricultural and Helicopter ops on grass area N of Rwy 09-27.

COMMUNICATIONS: CTAF/UNICOM 122.8

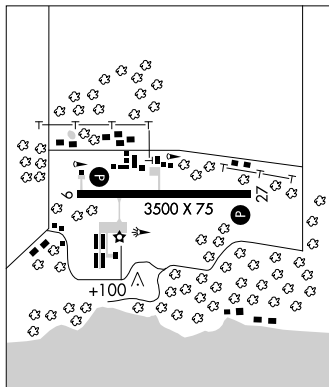
Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 111° 21 NM to fld. 920/1W.

**LAMBERTVILLE****TOLEDO SUBURBAN** (DUH) 2 SW UTC-5(-4DT) N41°44.15' W83°39.35'

DETROIT

669 B S4 FUEL 100LL, JET A NOTAM FILE DUH

L-28J

RWY 09-27: H4851X50 (ASPH) MIRL

IAP

RWY 09: Thld dspcd 1298'. Trees.

RWY 27: Thld dspcd 1017'. Road.

AIRPORT REMARKS: Attended May-Sept 1300-0100Z±, Oct-Apr 1300-2300Z±. Deer on and invof arpt. Parallel twy CLOSED indef. 4' fence 110' N side of rwy. Crops 50' S side of rwy in primary surface. ACTIVATE NSTD MIRL Rwy 09-27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.175 (734) 856-1563.**COMMUNICATIONS:** CTAF/UNICOM 122.7

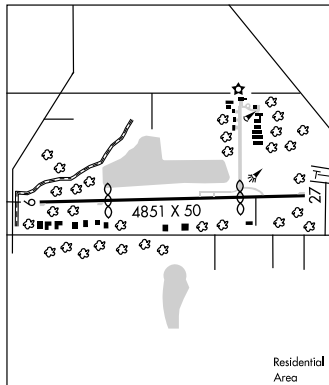
WATERVILLE RCO 122.1R 113.1T (CLEVELAND RADIO)

Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09'

W83°38.32' 359° 17.1 NM to fld. 660/2W.

**LANSING** N42°43.05' W84°41.86' NOTAM FILE LAN.

DETROIT

(L) VORTACW 110.8 LAN Chan 45 340° 3.8 NM to Abrams Muni. 887/5W.

H-5E, 106, L-28J

VOR unusable 102°-158° blo 5000'.

RCO 122.2 (LANSING RADIO)

APP CRS	Rwy Idg	3500
094°	TDZE	969
	Apt Elev	969

GPS RWY 9

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)



Use Roben-Hood altimeter setting.

MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 direct TRUFA WP and hold.

ROBEN-HOOD AWOS-3
121.125GRAND RAPIDS APP CON ★
124.6 257.6UNICOM
122.8 (CTAF) 0

1557

(IAF)
YOBTU3000
184° (8.4)HERSEY
MOA

1475

AWOYU

2600
094°
(5)

RW09

(FAF)
KAWDO

1264 ±

1249

(IAF)
FOXYO3000
004°
(5)

MSA RW09 25 NM

2600

 3000
314°
(6.6)

TRUFA

084°
264°

ELEV 969

094° to
RW09TDZE
969

3500 X 75

1091 ±

AWOYU

3000

KAWDO

2600

RW09

Procedure
Turn
NA

5 NM

5 NM

CATEGORY

A

B

C

D

S-9

1400-1

431 (500-1)

NA

CIRCLING

1440-1

1580-1

NA

471 (500-1)

611 (700-1)

MIRL Rwy 9-27 0

REIL Rwys 9 and 27 0

APP CRS
274°

Rwy Idg **3500**
TDZE **969**
Apt Elev **969**

GPS RWY 27

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)



NA

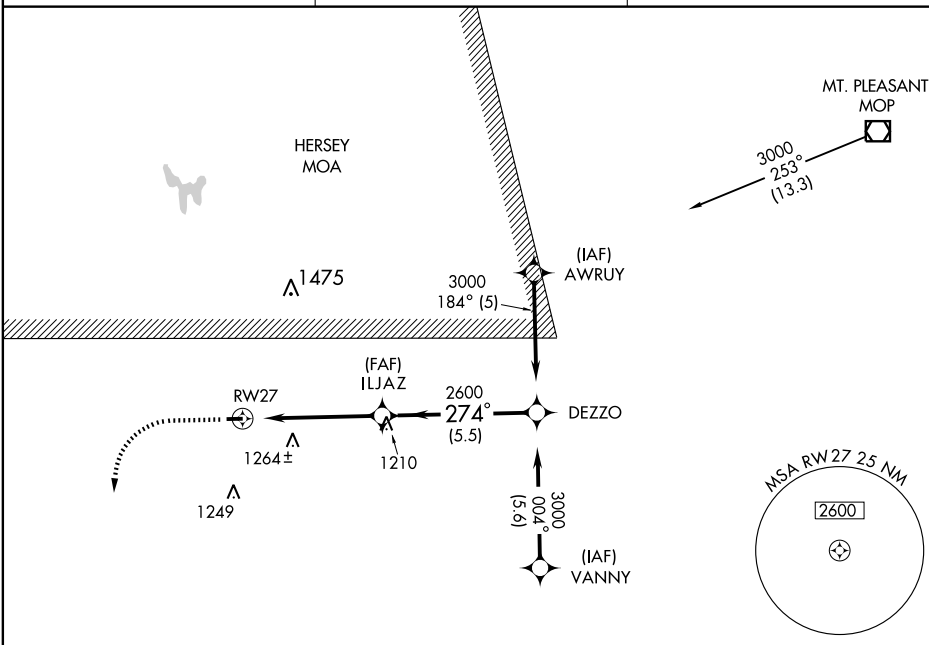
Use Roben-Hood altimeter setting.

MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 direct TRUFA WP and hold.

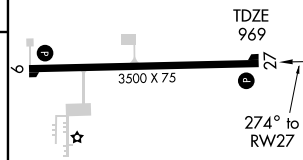
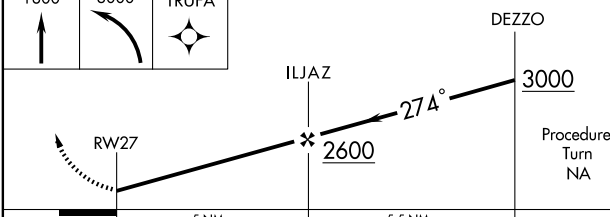
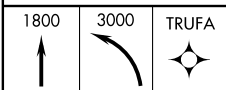
ROBEN-HOOD AWOS-3
121.125

GRAND RAPIDS APP CON ★
124.6 257.6

UNICOM
122.8 (CTAF) 0



ELEV 969



CATEGORY	A	B	C	D
S-27	1460-1	491 (500-1)	NA	
CIRCLING	1460-1 491 (500-1)	1580-1 611 (700-1)	NA	

MIRL Rwy 9-27 0
REIL Rwy 9 and 27 0

VOR/DME HIC 117.6 Chan 123	APP CRS 112°	Rwy Idg TDZE Apt Elev	3500 969 969
--	------------------------	-----------------------------	---

VOR/DME RWY 9

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)

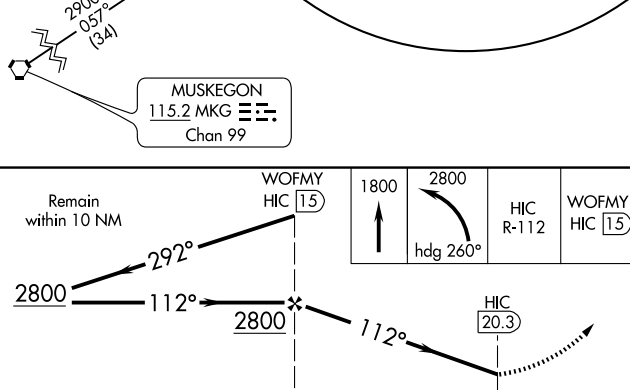
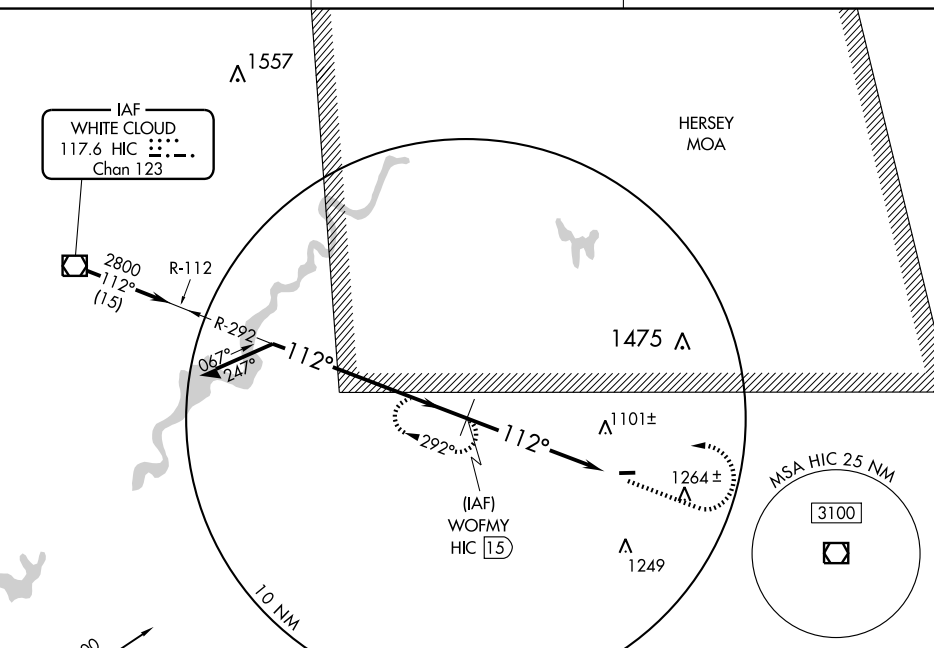
NA Use Roben-Hood altimeter setting.

MISSED APPROACH: Climb to 1800, then climbing left turn to 2800 via heading 260° and HIC VOR/DME R-112 to WOFMY and hold.

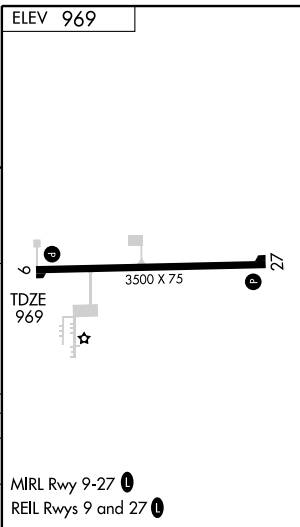
ROBEN-HOOD AWOS-3
121.125

GRAND RAPIDS APP CON *
124.6 257.6

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
S-9	1600-1 631 (700-1)	1600-1¼ 631 (700-1¼)	NA	
CIRCLING	1600-1 631 (700-1)	1600-1¼ 631 (700-1¼)	NA	



LAKEVIEW ARPT—GRIFFITH FLD (13C) 1 NE UTC-5(-4DT) N43°27.13' W85°15.89'

CHICAGO

969 B S4 FUEL 100LL NOTAM FILE LAN

L-28J

RWY 09-27: H3500X75 (ASPH) S-12 MIRL

IAP

RWY 09: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P2L)-GA 3.0° TCH 50'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. For service after hrs call assistant arpt manager on 616-527-0915. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwys 09 and 27—CTAF. Agricultural and Helicopter ops on grass area N of Rwy 09-27.

COMMUNICATIONS: CTAF/UNICOM 122.8

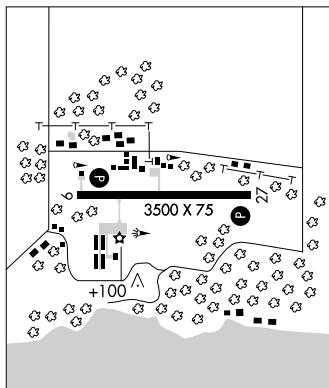
Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 111° 21 NM to fld. 920/1W.

**LAMBERTVILLE****TOLEDO SUBURBAN** (DUH) 2 SW UTC-5(-4DT) N41°44.15' W83°39.35'

DETROIT

669 B S4 FUEL 100LL, JET A NOTAM FILE DUH

L-28J

RWY 09-27: H4851X50 (ASPH) MIRL

IAP

RWY 09: Thld displcd 1298'. Trees.

RWY 27: Thld displcd 1017'. Road.

AIRPORT REMARKS: Attended May-Sept 1300-0100Z±, Oct-Apr 1300-2300Z±. Deer on and invof arpt. Parallel twy CLOSED indef. 4' fence 110' N side of rwy. Crops 50' S side of rwy in primary surface. ACTIVATE NSTD MIRL Rwy 09-27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.175 (734) 856-1563.**COMMUNICATIONS:** CTAF/UNICOM 122.7

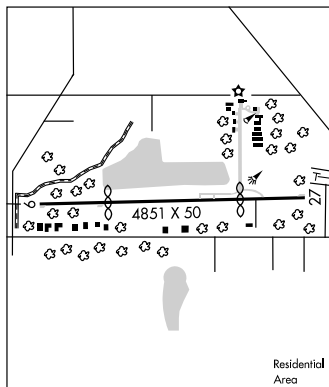
WATERVILLE RCO 122.1R 113.1T (CLEVELAND RADIO)

Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09'

W83°38.32' 359° 17.1 NM to fld. 660/2W.

**LANSING** N42°43.05' W84°41.86' NOTAM FILE LAN.

DETROIT

(L) VORTACW 110.8 LAN Chan 45 340° 3.8 NM to Abrams Muni. 887/5W.

H-5E, 106, L-28J

VOR unusable 102°-158° blo 5000'.

RCO 122.2 (LANSING RADIO)

VOR/DME VVWV 113.1 Chan 78	APP CRS 360°	Rwy Idg TDZE Apt Elev 669	N/A N/A 669
--	------------------------	---	--------------------------

VOR or GPS-A

LAMBERTVILLE/ TOLEDO SUBURBAN (DUH)

▼
▲ NA Use Toledo Express altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via VVW R-360 to VVW VOR/DME and hold.

AWOS-3
119.175

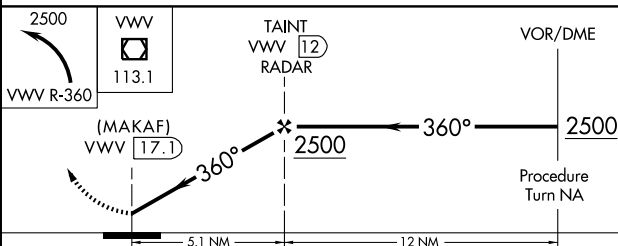
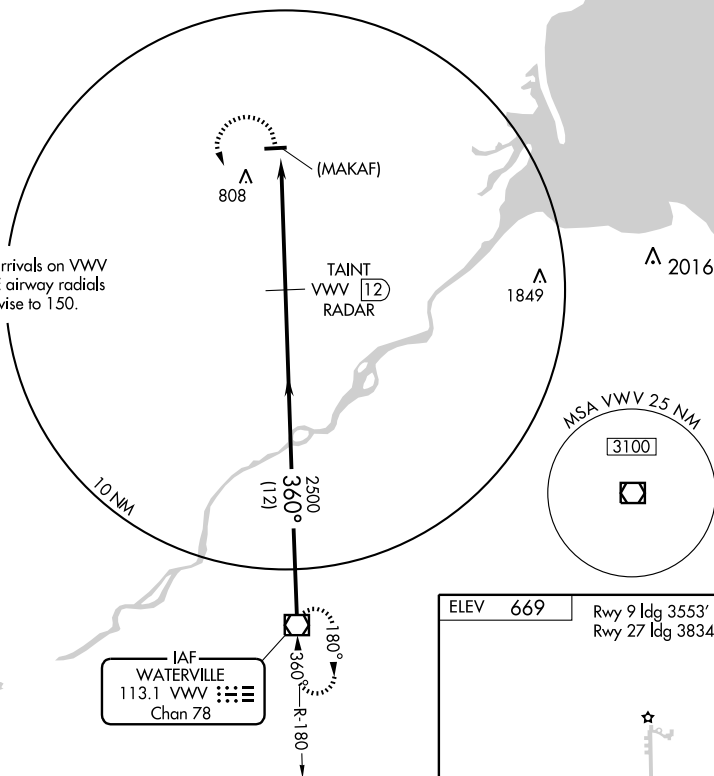
TOLEDO APP CON
134.35 317.55

GCO
121.725

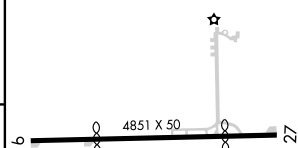
UNICOM
122.7 (CTAF) **0**

DME or RADAR REQUIRED

NoPT for arrivals on VVW
VOR/DME airway radials
093 clockwise to 150.



ELEV **669** Rwy 9 Idg 3553'
Rwy 27 Idg 3834'



360° 5.1 NM from FAF

MIRL Rwy 9-27 **0**

CATEGORY	A	B	C	D
CIRCLING	1160-1 496 (500-1)		1160-1 1/2 496 (500-1 1/2)	NA

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

10210

AIRPORT DIAGRAM

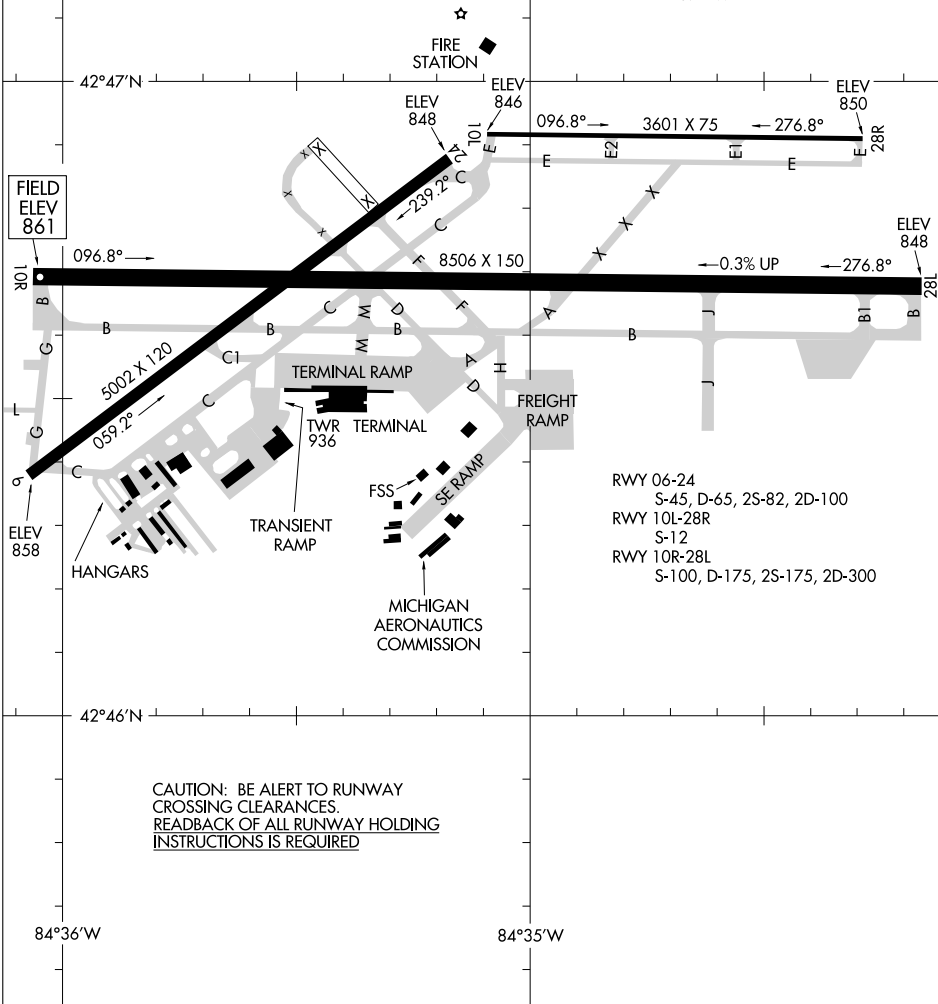
AL-224 (FAA)

LANSING/CAPITAL REGION INTL (L.A.N)
LANSING, MICHIGAN

ATIS
119.75
LANSING TOWER
119.9 240.9
GND CON
121.9
CLNC DEL
123.675

VAR 6.2° N
JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

10210

LANSING, MICHIGAN
LANSING/CAPITAL REGION INTL (L.A.N)

LANSING

CAPITAL REGION INTL (LAN) 3 NW UTC-5(-4DT) N42°46.72' W84°35.17'

861 B S4 FUEL 100LL, JET A OX 1 AOE ARFF Index—See Remarks

DETROIT

H-5E, 106, L-28J

IAP, AD

RWY 10R-28L: H8506X150 (ASPH-GRVD) S-100, D-175, 2S-175,
2D-300 HIRL

RWY 10R: MALSR. RWY 28L: MALSR.

RWY 06-24: H5002X120 (ASPH) S-45, D-65, 2S-82,
2D-100 MIRL

RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

RWY 24: REIL. PAPI(P4L)—GA 3.0° TCH 42'. Trees.

RWY 10L-28R: H3601X75 (ASPH) S-12 MIRL

RWY 10L: Trees. RWY 28R: Road.

AIRPORT REMARKS: Attended continuously. Birds on and in/ovf arpt.

Class I, ARFF Index B. ARFF index C avbl on request; call arpt manager 517-321-6121. Rwy 10L-28R not avbl to air carrier acft with more than 9 passenger seats. Twy A N of Rwy 28; Twys E and G not avbl to air carrier acft with more than 9 passenger seats. Ldg fee. Acft blo 6500 lbs exempt from ldg fee. Intl arrivals accepted up to 20 passenger seats. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (517) 886-0015. LLWAS.

COMMUNICATIONS: ATIS 119.75 UNICOM 122.95

LANSING FSS (LAN) on arpt.

LANSING RCO 122.2 (LANSING RADIO)

Ⓡ LANSING APP/DEP CON 133.475 (North) 118.65 (South)

LANSING TOWER 119.9 GND CON 121.9 CLNC DEL 123.675

AIRSPACE: CLASS C svc continuous ctc APP CON

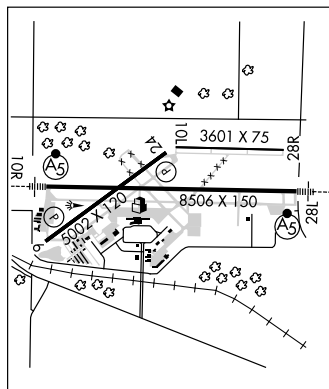
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 058° 6.1 NM to fld. 887/5W.

ILS 110.1 I-LAN Rwy 28L.

ILS 111.7 I-CPQ Rwy 10R. Class ID. ILS unusable byd 25° left and right of course.

ASR



LAPEER

DUPONT-LAPEER (D95) 2 NE UTC-5(-4DT) N43°03.99' W83°16.31'

834 B S4 FUEL 100LL NOTAM FILE LAN

RWY 18-36: H3800X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 4.0° TCH 36'. Trees.

RWY 36: REIL. PAPI (P2L)—GA 4.0° TCH 33'. Trees.

RWY 09-27: 1900X150 (TURF)

RWY 09: Thld displcd 500'. Bldg. RWY 27: Trees.

AIRPORT REMARKS: Attended 1300-2300Z±. Arpt unattended

Christmas, New Year's, Easter Sun and Thanksgiving day. Rwy 09-27 CLOSED Nov thru Apr. Two center and S twy connectors clsd indef. Rwy 09-27 and displcd thld marked with 3' yellow cones. Rotating bcn opr dusk-0400Z±. For rotating bcn after 0400Z± ACTIVATE—CTAF. ACTIVATE MIRL Rwy 18-36, PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

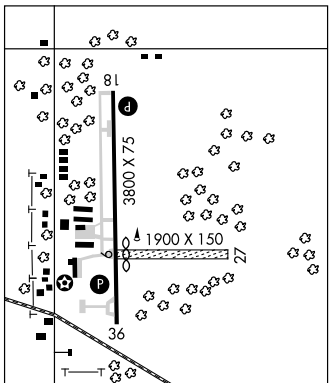
CLEVELAND CENTER APP/DEP CON 127.7 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 079° 21.8 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage. APP/DEP CON and CLNC DEL not available on the ground.



DETROIT

L-28J

IAP

LENAAWEE CO (See ADRIAN)

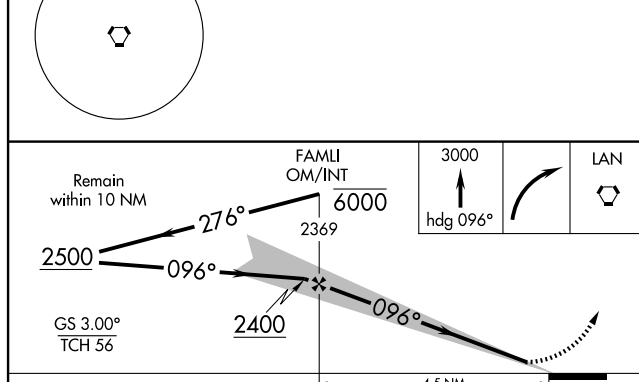
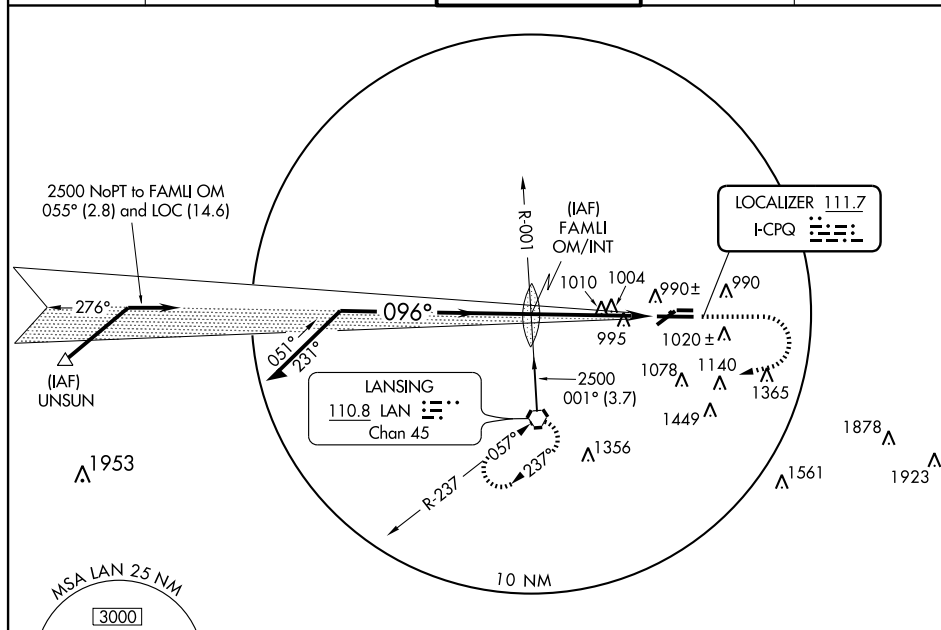
LEO E. GOETZ CO (See ONAWAY)

LOC I-CPQ 111.7	APP CRS 096°	Rwy Idg 8506 TDZE 861 Apt Elev 861
---------------------------	------------------------	---

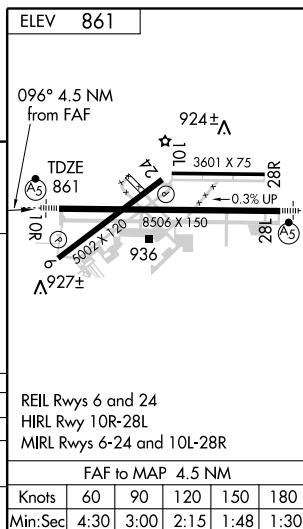
ILS or LOC RWY 10R

LANSING/CAPITAL REGION INTL (LAN)

<div><div><div><div></div><div>ASR</div></div></div><div>*RVR 1800 authorized with the use of FD or AP or HUD to DA.</div></div>		<div><div><div><div></div><div>MALSR</div></div><div><div><div></div><div></div><div></div><div></div><div></div></div></div></div></div>	MISSED APPROACH: Climb to 3000 via heading 096°, then right turn direct LAN VORTAC and hold.		
ATIS 119.75	LANSING APP CON 133.475 226.4 (NORTH) 118.65 226.4 (SOUTH)	LANSING TOWER 119.9 240.9	GND CON 121.9	CLNC DEL 123.675	



CATEGORY	A	B	C	D
S-ILS 10R	*1061/24 200 (200-½)			
S-LOC 10R	1320/24	459 (500-½)	1320/40 459 (500-¾)	1320/50 459 (500-1)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)



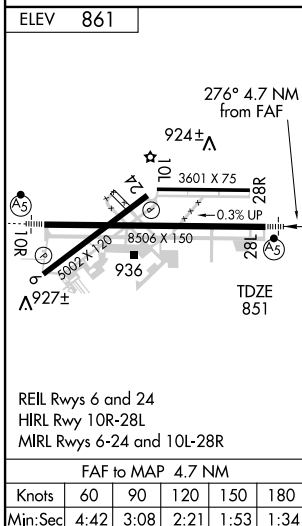
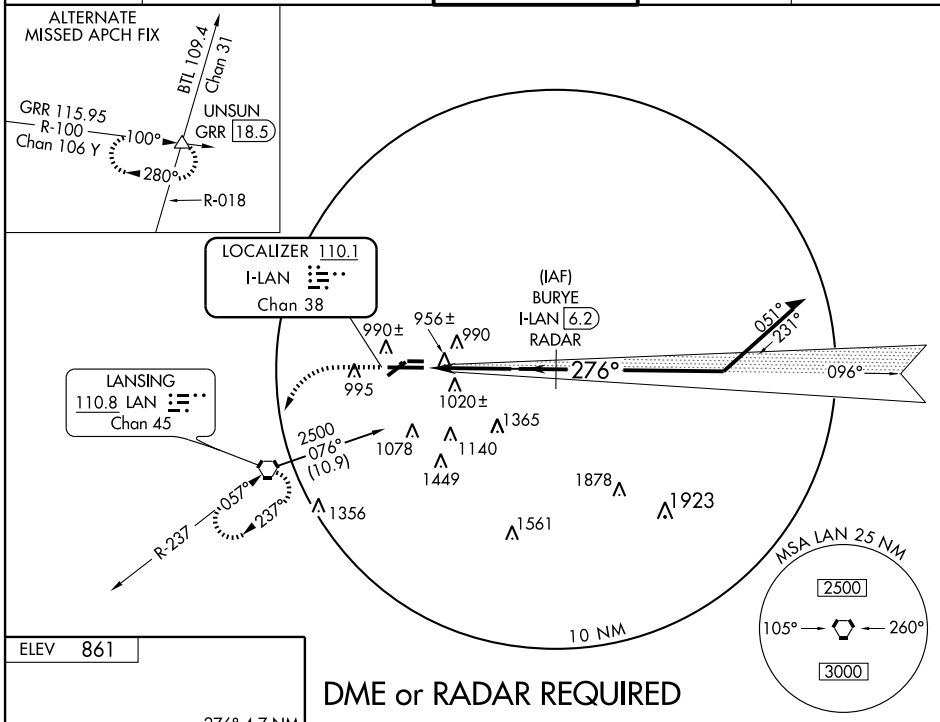
LOC/DME I-LAN 110.1 Chan 38	APP CRS 276°	Rwy Idg TDZE Apt Elev	8506 851 861
---	------------------------	-----------------------------	---

ILS or LOC RWY 28L

LANSING/CAPITAL REGION INTL (LAN)

▼ DME or RADAR REQUIRED. ASR *RVR 1800 authorized with the use of FD or AP or HUD to DA.	MALS 	MISSED APPROACH: Climb to 2500, then left turn direct LAN VORTAC and hold.
---	-----------------	---

ATIS 119.75	LANSING APP CON 133.475 226.4 (NORTH) 118.65 226.4 (SOUTH)	LANSING TOWER 119.9 240.9	GND CON 121.9	CLNC DEL 123.675
------------------------------	---	--	--------------------------------	-----------------------------------



DME or RADAR REQUIRED

ELEV 861	2500 	LAN 110.8	BURYE I-LAN 6.2 RADAR	Remain within 10 NM
276° 4.7 NM from FAF 924± 3601 X 75 28R 0.3% UP 5002 X 120 8506 X 150 936 28L 927± TDZE 851	2500 	LAN 110.8	BURYE I-LAN 6.2 RADAR	Remain within 10 NM
REIL Rwy 6 and 24 HIRL Rwy 10R-28L MIRL Rwy 6-24 and 10L-28R FAF to MAP 4.7 NM	2500 	LAN 110.8	BURYE I-LAN 6.2 RADAR	Remain within 10 NM
Knots 60 90 120 150 180 Min:Sec 4:42 3:08 2:21 1:53 1:34	2500 	LAN 110.8	BURYE I-LAN 6.2 RADAR	Remain within 10 NM
CATEGORY	A	B	C	D
S-ILS 28L	* 1051/24 200 (200-½)			
S-LOC 28L	1300/24 449 (500-½)	1300/40 519 (600-¾)	1300/50 449 (500-1)	1300/50 449 (500-1)
CIRCLING	1380-1 519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)	1440-2 579 (600-2)

WAAS CH 82118 W06A	APP CRS 058°	Rwy Idg TDZE Apt Elev	5002 858 861
--	------------------------	-----------------------------	---

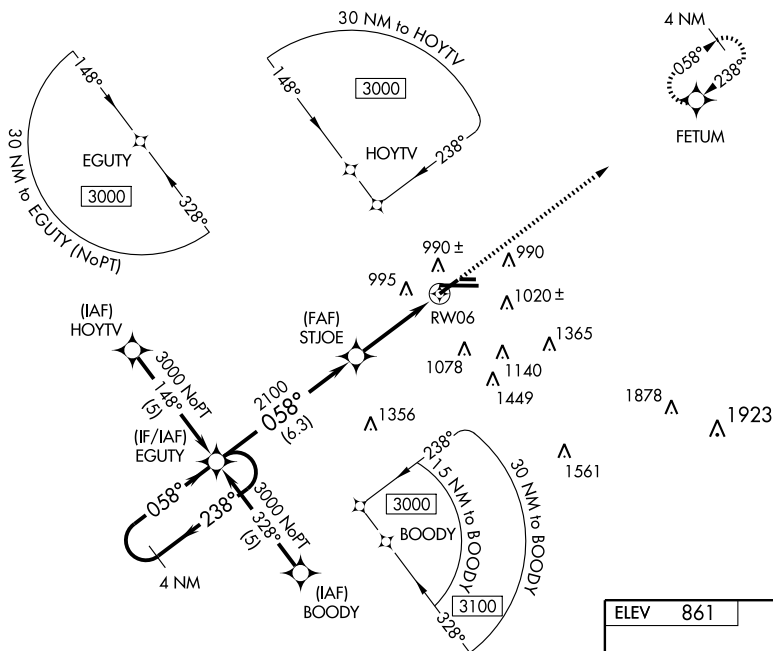
RNAV (GPS) RWY 6

LANSING/CAPITAL REGION INTL (LAN)

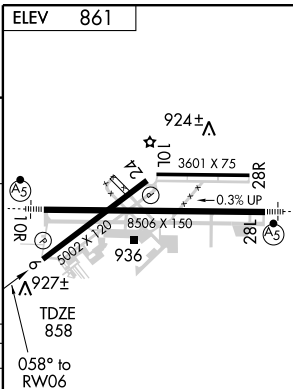
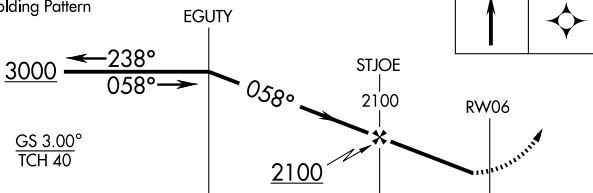
ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct FETUM and hold.

ATIS 119.75	LANSING APP CON 133.475 226.4 (NORTH) 118.65 226.4 (SOUTH)	LANSING TOWER 119.9 240.9	GND CON 121.9	CLNC DEL 123.675
-----------------------	--	-------------------------------------	-------------------------	----------------------------



4 NM
Holding Pattern



CATEGORY	A	B	C	D
LPV DA	1140-1	282 (300-1)		
LNAV/VNAV DA	1338-1 $\frac{3}{4}$	480 (500-1 $\frac{3}{4}$)		
LNAV MDA	1340-1 482 (500-1)	1340-1 $\frac{1}{4}$ 482 (500-1 $\frac{1}{4}$)	1340-1 $\frac{1}{2}$ 482 (500-1 $\frac{1}{2}$)	
CIRCLING	1380-1 519 (600-1)	1380-1 $\frac{1}{2}$ 519 (600-1 $\frac{1}{2}$)	1440-2 579 (600-2)	

REIL Rwy 6 and 24
HIRL Rwy 10R-28L
MIRL Rwy 6-24 and 10L-28R

WAAS CH 61314 W10A	APP CRS 096°	Rwy Idg TDZE Apt Elev	8506 861 861
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 10R

LANSING/CAPITAL REGION INTL (LAN)

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 3000 direct DUTVE and hold.

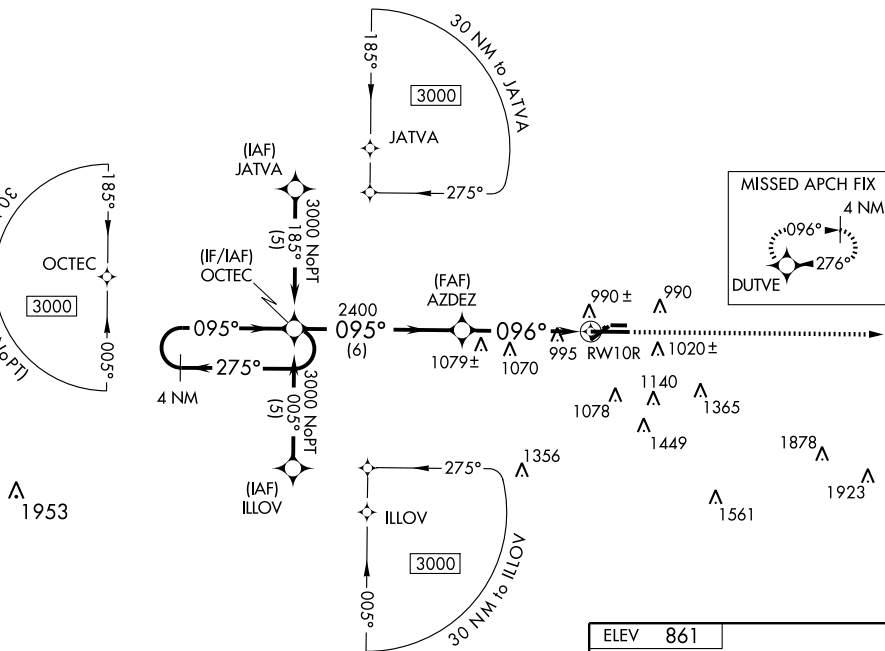
ATIS
119.75

LANSING APP CON
133.475 226.4 (NORTH)
118.65 226.4 (SOUTH)

LANSING TOWER
119.9 240.9

GND CON
121.9

CLNC DEL
123.675



4 NM
Holding Pattern

OCTEC
3000 ← 275°
095° →

GS 3.00°
TCH 56

AZDEZ

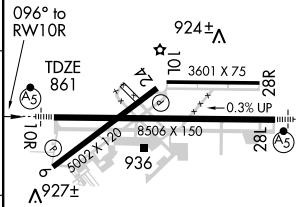
2400

* 1.3 NM to RW10R * LNAV only

RW10R



ELEV 861



CATEGORY	A	B	C	D
LPV DA	1061/24		200 (200-½)	
LNAV/VNAV DA	1290/50		429 (500-1)	
LNAV MDA	1320/24	459 (500-½)	1320/40 459 (500-¾)	1320/50 459 (500-1)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)

REIL Rwy 6 and 24
HIRL Rwy 10R-28L
MIRL Rwy 6-24 and 10L-28R

WAAS CH 50413 W24A	APP CRS 238°	Rwy Idg TDZE Apt Elev	5002 857 861
--	------------------------	-----------------------------	---

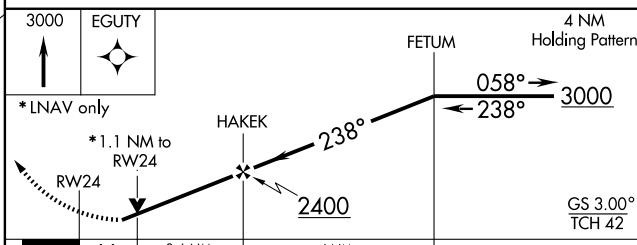
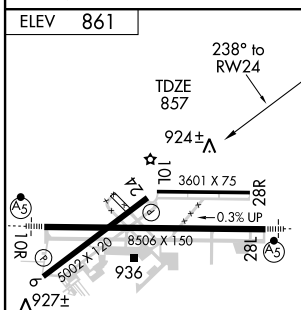
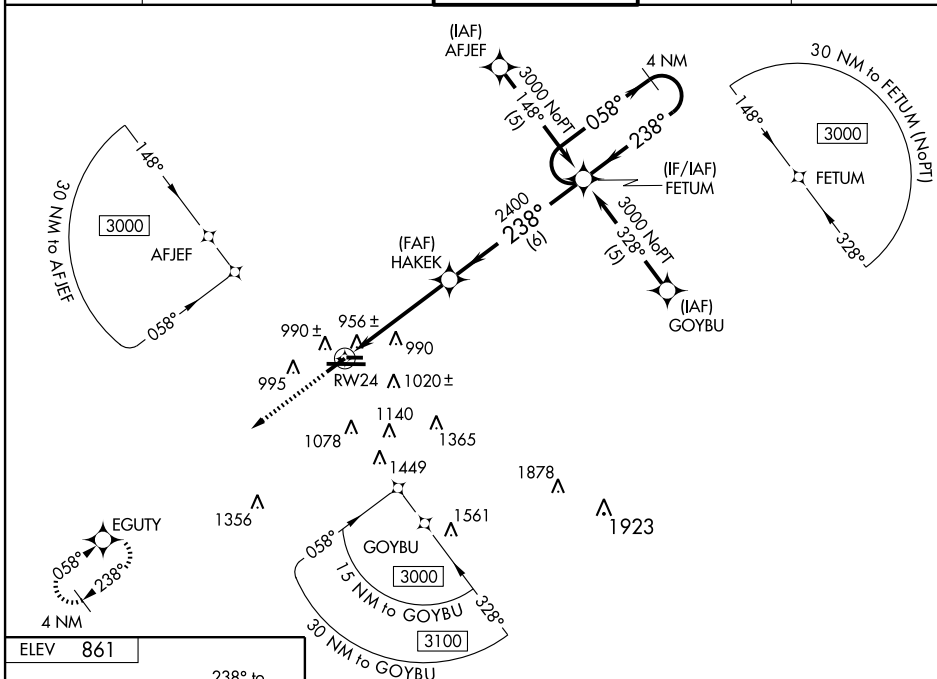
RNAV (GPS) RWY 24

LANSING/CAPITAL REGION INTL (L.A.N)

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct EGUTY and hold.

ATIS 119.75	LANSING APP CON 133.475 226.4 (NORTH) 118.65 226.4 (SOUTH)	LANSING TOWER 119.9 240.9	GND CON 121.9	CLNC DEL 123.675
-----------------------	--	-------------------------------------	-------------------------	----------------------------



CATEGORY	A	B	C	D
LPV DA	1215-1¼ 358 (400-1¼)			
LNAV/VNAV DA	1254-1½ 397 (400-1½)			
LNAV MDA	1240-1 383 (400-1)			1240-1¼ 383 (400-1¼)
CIRCLING	1380-1 519 (600-1)		1380-1½ 519 (600-1½)	1440-2 579 (600-2)

REIL Rwy 6 and 24
HIRL Rwy 10R-28L
MIRL Rwy 6-24 and 10L-28R

WAAS CH 40414 W28A	APP CRS 276°	Rwy Idg 8506 TDZE 851 Apt Elev 861
--	------------------------	---

RNAV (GPS) RWY 28L
LANSING/CAPITAL REGION INTL (LAN)

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP-0.3 NA.

MALSR

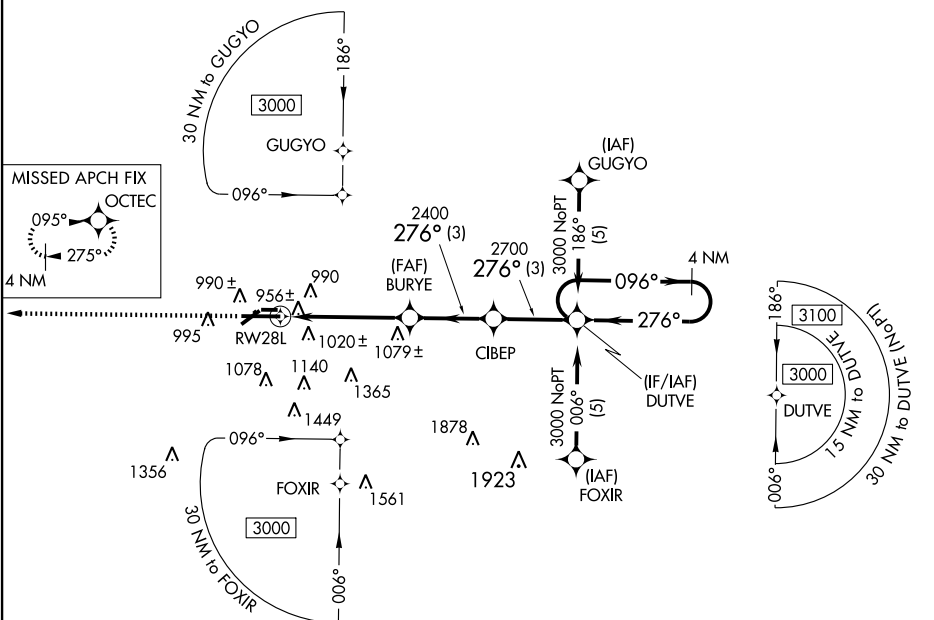
MISSED APPROACH: Climb to 3000 direct OCTEC and hold.

ATIS
119.75

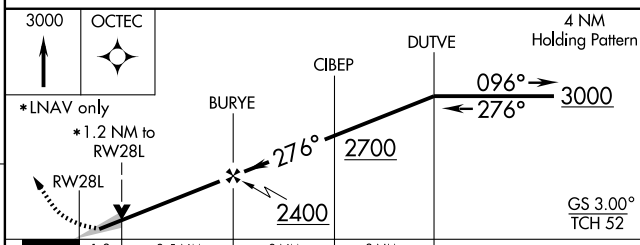
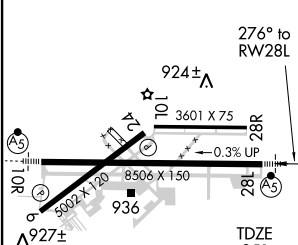
LANSING APP CON
133.475 226.4 (NORTH)
118.65 226.4 (SOUTH)

LANSING TOWER
119.9 240.9

GND CON
121.9

CLNC DEL
123.675

ELEV 861



CATEGORY		A	B	C	D
LPV DA		1051/24 200 (200-½)			
LNAV/VNAV DA		1370/60 519 (600-1¼)			
LNAV MDA		1280/24 429 (500-½)	1280/40 429 (500-¾)	1280/50 429 (500-1)	
CIRCLING		1380-1 519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)	

REIL Rwy 6 and 24
HIRL Rwy 10R-28L
MIRL Rwy 6-24 and 10L-28R

LANRING, MICHIGAN
Orig 10098

42°47'N - 84°35'W

LANSGING/CAPITAL REGION INTL (LAN)
RNAV (GPS) RWY 28L

EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC LAN
110.8
Chan 45

APP CRS
057°

Rwy Idg	5002
TDZE	858
Apt Elev	861

VOR RWY 6

LANSING/CAPITAL REGION INTL (LAN)



Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 2600 direct LAN VORTAC and hold.

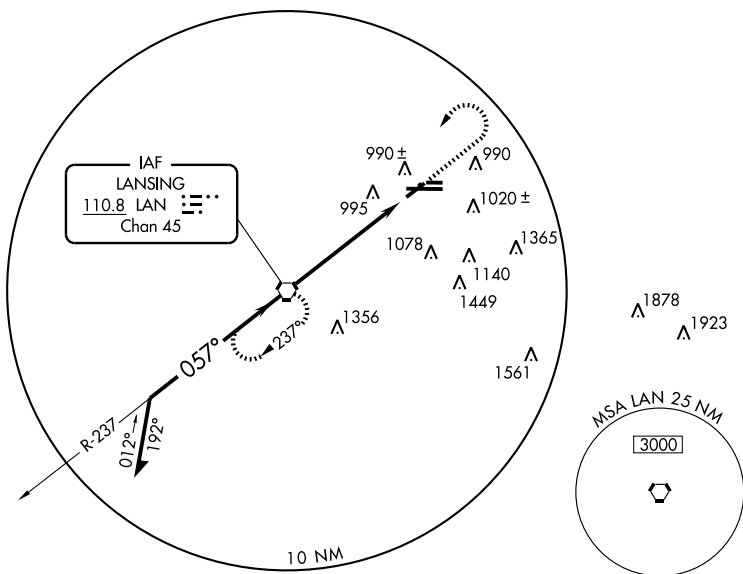
ATIS
119.75

LANSING APP CON
133.475 226.4 (NORTH)
118.65 226.4 (SOUTH)

LANSING TOWER
119.9 240.9

GND CON
121.9

CLNC DEL
123.675



EC-1. 26 AUG 2010 to 23 SEP 2010

Remain
within 10 NM

VORTAC

2600

057°

LAN 5.4

TCH 40

CATEGORY

A

13

--	--

49

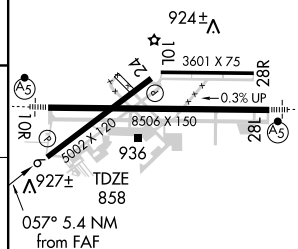
B

00

13

1 1/4

ELEV 861



REIL Rwy 6 and 24

HIRL Rwy 10R-28L

MIRL Rwy 6-24 and 10L-28R

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

LANSING, MICHIGAN

Amdt 25 29JUL10

42°47'N - 84°35'W

LANSING/CAPITAL REGION INTL (LAN)

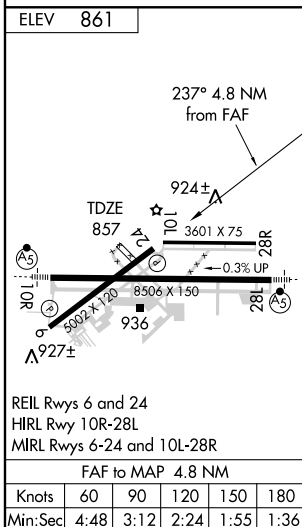
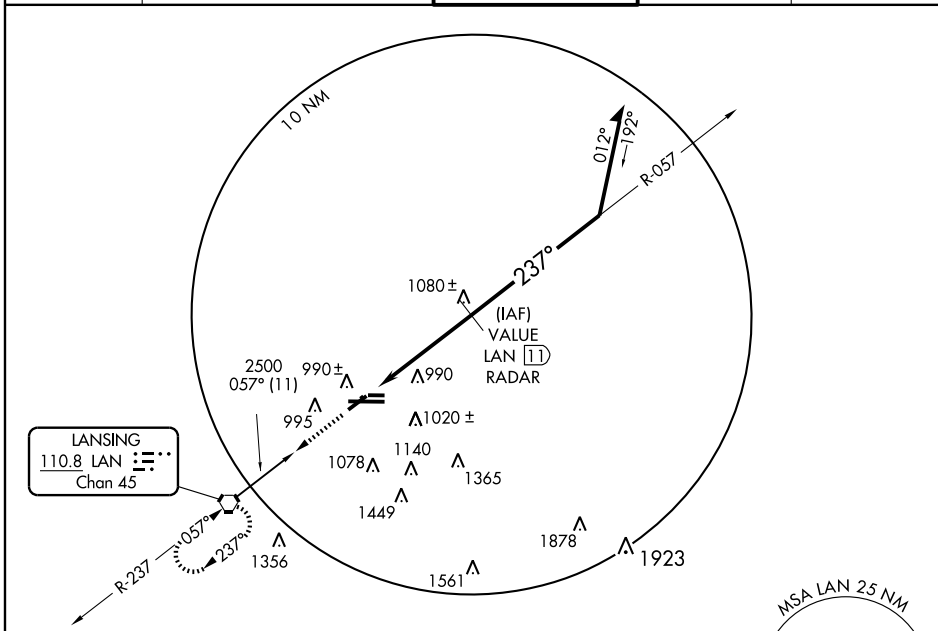
VOR RWY 6

VORTAC LAN 110.8 Chan 45	APP CRS 237°	Rwy Idg TDZE 857 Apt Elev 861
--	------------------------	---

VOR RWY 24

LANSING/CAPITAL REGION INTL (LAN)

V ASR DME or RADAR Required. Visibility reduction by helicopters NA.		MISSED APPROACH: Climb to 2500 direct LAN VORTAC and hold.		
ATIS 119.75	LANSING APP CON 133.475 226.4 (NORTH) 118.65 226.4 (SOUTH)	LANSING TOWER 119.9 240.9	GND CON 121.9	CLNC DEL 123.675

**DME or RADAR REQUIRED**

2500 LAN 110.8		VALUE LAN 11 RADAR		Remain within 10 NM
LAN 7.4 LAN 6.2 TCH 42 3.00° 1.2 3.6 NM		2500 2400 057° 237°		
CATEGORY	A	B	C	D
S-24	1260-1	403 (400-1)	1260-1¼	403 (400-1¼)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)

LANSING, MICHIGAN

Amdt 9 10098

42°47'N - 84°35'W

LANSING/CAPITAL REGION INTL (LAN)

VOR RWY 24

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING

CAPITAL REGION INTL (LAN) 3 NW UTC-5(-4DT) N42°46.72' W84°35.17'

861 B S4 FUEL 100LL, JET A OX 1 AOE ARFF Index—See Remarks

DETROIT

H-5E, 106, L-28J

IAP, AD

RWY 10R-28L: H8506X150 (ASPH-GRVD) S-100, D-175, 2S-175,
2D-300 HIRL

RWY 10R: MALSR. RWY 28L: MALSR.

RWY 06-24: H5002X120 (ASPH) S-45, D-65, 2S-82,
2D-100 MIRL

RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

RWY 24: REIL. PAPI(P4L)—GA 3.0° TCH 42'. Trees.

RWY 10L-28R: H3601X75 (ASPH) S-12 MIRL

RWY 10L: Trees. RWY 28R: Road.

AIRPORT REMARKS: Attended continuously. Birds on and in/ovf arpt.

Class I, ARFF Index B. ARFF index C avbl on request; call arpt manager 517-321-6121. Rwy 10L-28R not avbl to air carrier acft with more than 9 passenger seats. Twy A N of Rwy 28; Twys E and G not avbl to air carrier acft with more than 9 passenger seats. Ldg fee. Acft blo 6500 lbs exempt from ldg fee. Intl arrivals accepted up to 20 passenger seats. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (517) 886-0015. LLWAS.

COMMUNICATIONS: ATIS 119.75 UNICOM 122.95

LANSING FSS (LAN) on arpt.

LANSING RCO 122.2 (LANSING RADIO)

Ⓡ LANSING APP/DEP CON 133.475 (North) 118.65 (South)

LANSING TOWER 119.9 GND CON 121.9 CLNC DEL 123.675

AIRSPACE: CLASS C svc continuous ctc APP CON

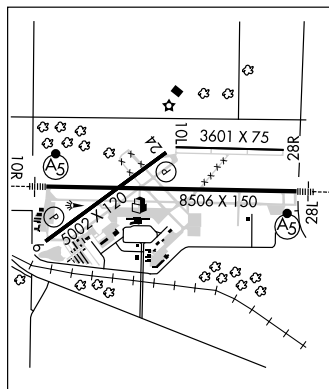
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 058° 6.1 NM to fld. 887/5W.

ILS 110.1 I-LAN Rwy 28L.

ILS 111.7 I-CPQ Rwy 10R. Class ID. ILS unusable byd 25° left and right of course.

ASR



LAPEER

DUPONT-LAPEER (D95) 2 NE UTC-5(-4DT) N43°03.99' W83°16.31'

834 B S4 FUEL 100LL NOTAM FILE LAN

RWY 18-36: H3800X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 4.0° TCH 36'. Trees.

RWY 36: REIL. PAPI(P2L)—GA 4.0° TCH 33'. Trees.

RWY 09-27: 1900X150 (TURF)

RWY 09: Thld displcd 500'. Bldg. RWY 27: Trees.

AIRPORT REMARKS: Attended 1300-2300Z±. Arpt unattended

Christmas, New Year's, Easter Sun and Thanksgiving day. Rwy 09-27 CLOSED Nov thru Apr. Two center and S twy connectors clsd indef. Rwy 09-27 and displcd thld marked with 3' yellow cones. Rotating bcn opr dusk-0400Z±. For rotating bcn after 0400Z± ACTIVATE—CTAF. ACTIVATE MIRL Rwy 18-36, PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

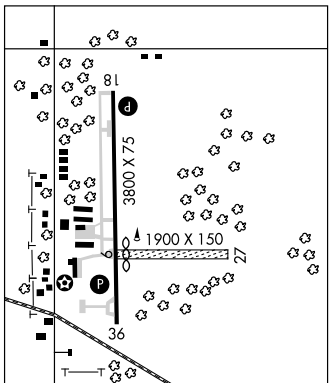
CLEVELAND CENTER APP/DEP CON 127.7 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 079° 21.8 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage. APP/DEP CON and CLNC DEL not available on the ground.



LENAAWEE CO (See ADRIAN)

LEO E. GOETZ CO (See ONAWAY)

VORTAC FNT 116.9 Chan 116	APP CRS 080°	Rwy Idg TDZE Apt Elev	N/A N/A 844
---	------------------------	-----------------------------	--

VOR-A
LAPEER/ DUPONT-LAPEER (D95)

▼
▲ NA Use Flint altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via FNT R-080 to MIXED INT/FNT 16 DME and hold.

FLINT APP CON ★
118.8 257.9

UNICOM
123.0 (CTAF) **0**

IAF
FLINT
116.9 FNT
Chan 116

3000
080°
(10)

COLBA INT
FNT **10**

2500
080°
(6)

1085

260°

1300

1207

1156 ±

MIXED INT
FNT **16**

10 NM

MSA FNT 25 NM

3100

1849

R-004

R-020

CAUTION: NE/SW drag strip
2 miles North of Airport.

PONTIAC
111.0 PSI
Chan 47

ELEV **844**

Rwy 9 Idg 1400'

930 ±

81

3800 X 75

940 ±

930 ±

36

080° 5.6 NM
from FAF

MIRL Rwy 18-36 **0**

REIL Rwy 18 and 36 **0**

COLBA INT
FNT **10**

3000

MIXED INT
FNT **16**

080°

2500

2500

FNT R-080
116.9

MIXED
INT

FNT **21.6**

Procedure
Turn
NA

6 NM

5.6 NM

CATEGORY	A	B	C	D
CIRCLING	1460-1 616 (700-1)	1460-1¼ 616 (700-1¼)	1460-1¾ 616 (700-1¾)	NA

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

LEWISTON

GARLAND (8M8) 5 SE UTC-5(-4DT) N44°48.39' W84°16.57'

LAKE HURON

1218 B NOTAM FILE LAN

H-2K, 11A, L-31C

RWY 18-36: H5047X75 (ASPH) S-15 MIRL

RWY 18: Trees. RWY 36: PAPI(P2L)—GA 3.0° TCH 41'. Thld dsplcd 400'. Tree.

AIRPORT REMARKS: Unattended. Rwy 18-36 sfc large cracks in pavement. Non-aviation related cargo ops on north ramp. No acft parking. Acft use west ramp. Fence around arpt—keep gate clsd. ACTIVATE MIRL Rwy 18-36—CTAF. Landing fee.

COMMUNICATIONS: CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GAYLORD (L) VOR/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 130° 22NM to fld. 1318/4W.

LINCOLN

FLYING M RANCH (3L7) 3 NE UTC-5(-4DT) N44°44.30' W83°22.78'

LAKE HURON

830 NOTAM FILE LAN

RWY 09-27: 2200X90 (TURF)

RWY 09: Thld dsplcd 600'. P-line. RWY 27: Trees.

AIRPORT REMARKS: Attended May-Oct irregularly. Arpt CLOSED Nov-Apr and when snow covered. No snow removal. Occasional deer on rwy. Rwy 09-27 surface slightly rough and irregular on rolling terrain. Rwy slopes down from west to east. Rwy soft in spring. Rwy 09 p-line marked with orange balls.

COMMUNICATIONS: CTAF/UNICOM 123.0

LINDEN

PRICES (9G2) 1 S UTC-5(-4DT) N42°48.46' W83°46.20'

DETROIT

920 B S2 FUEL 100LL NOTAM FILE LAN

COTTER

RWY 09-27: H4000X75 (ASPH) MIRL 0.3% up W

L-28J

RWY 09: REIL. Thld dsplcd 268'. Trees.

IAP

RWY 27: Thld dsplcd 800'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer and birds on and in/ovf arpt. Airframe repairs: prior arrangement. ACTIVATE MIRL Rwy 09-27 and REIL Rwy 09—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z)

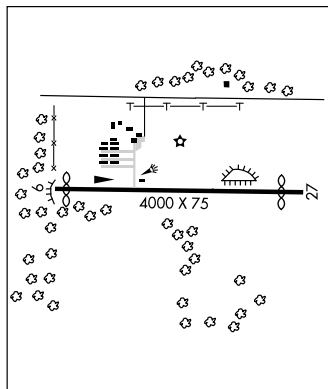
CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 193° 9.6 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.



LITCHFIELD N42°03.75' W84°45.91' NOTAM FILE LAN.

DETROIT

(L) VOR/DME 111.2 LFD Chan 49 141° 11.7 NM to Hillsdale Muni. 1040/05W.

H-5E, 10G, L-28J

DME unusable 110°-165° byd 35 NM below 3000'.

RCO 122.1R 111.2T (LANSING RADIO)

LIVINGSTON CO SPENCER J. HARDY (See HOWELL)

LOST CREEK (See LUZERNE)

APP CRS 095°	Rwy Idg TDZE Apt Elev	3732 919 920
------------------------	-----------------------------	---

RNAV (GPS) RWY 9

LINDEN/ PRICE'S (9G2)

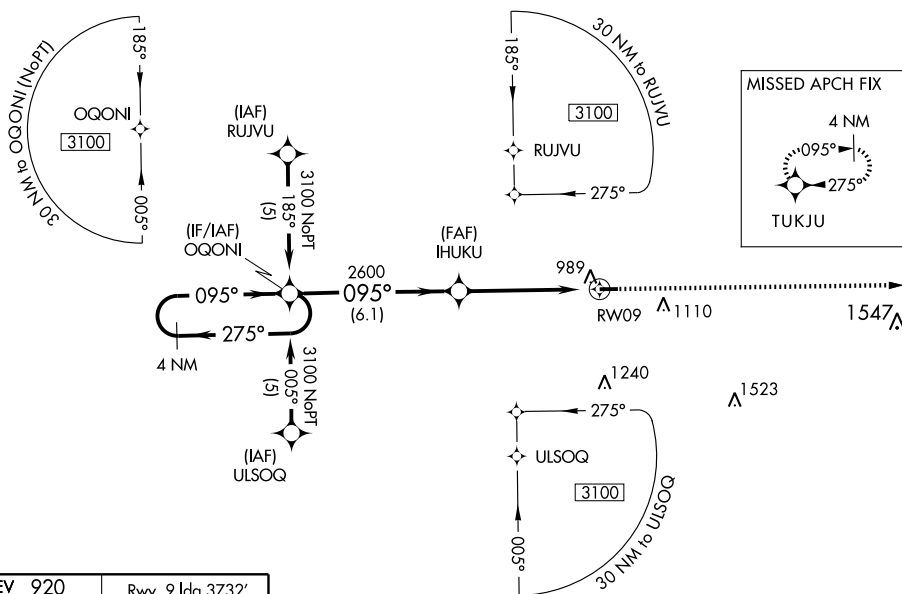
▼ Use Flint altimeter setting; when not received, use
▲ NA Howell altimeter setting. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2900
 direct TUKJU and hold.

FLINT ASOS
133.15

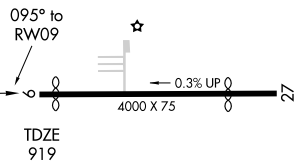
FLINT APP CON ★
118.8 257.9

UNICOM
123.0 (CTAF) 0

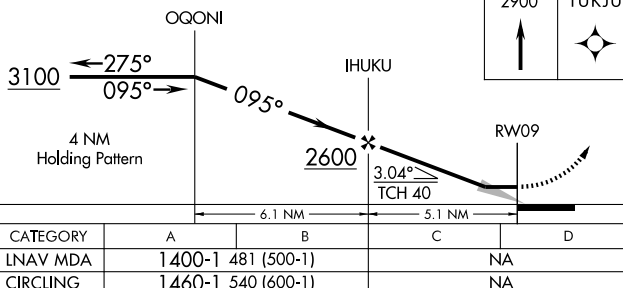


ELEV 920

Rwy 9 Idg 3732'
 Rwy 27 Idg 3200'



REIL Rwy 9 **0**
 MRL Rwy 9-27 **0**



APP CRS **275°**
 Rwy Idg **3200**
 TDZE **915**
 Apt Elev **920**

RNAV (GPS) RWY 27

LINDEN/ PRICE'S (9G2)

▽ Use Flint altimeter setting; when not received, use
▲ NA Howell altimeter setting. DME/DME RNP-0.3 NA.

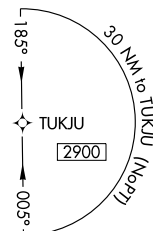
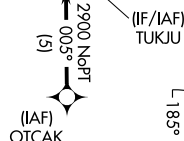
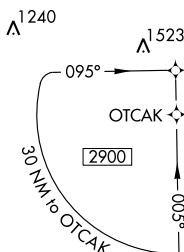
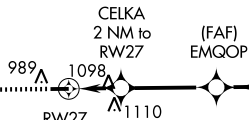
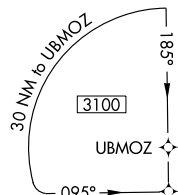
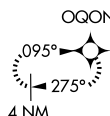
MISSED APPROACH: Climb to 3100
 direct OQONI and hold.

FLINT ASOS
133.15

FLINT APP CON ★
118.8 257.9

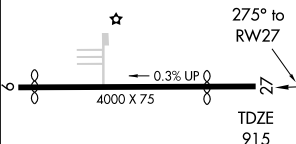
UNICOM
123.0 (CTAF) 0

MISSED APCH FIX

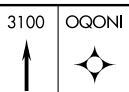


ELEV 920

Rwy 9 Idg 3732'
 Rwy 27 Idg 3200'



REIL Rwy 9 **0**
 MRL Rwy 9-27 **0**



CELKA 2 NM to RW27

EMGOP

TUKJU 4 NM Holding Pattern

RW27

2700

2900

1580

3.05° TCH 40

095° → 275°

2 NM

3.4 NM

6.1 NM

CATEGORY

A

B

C

D

LNAV MDA

1400-1 485 (500-1)

NA

NA

NA

CIRCLING

1460-1 540 (600-1)

NA

NA

NA

VORTAC FNT
116.9
Chan **116**

APP CRS
192°

Rwy Idg	
TDZE	
Apt Elev	

N/A
N/A
920

VOR-A

LINDEN/ PRICE'S (9G2)

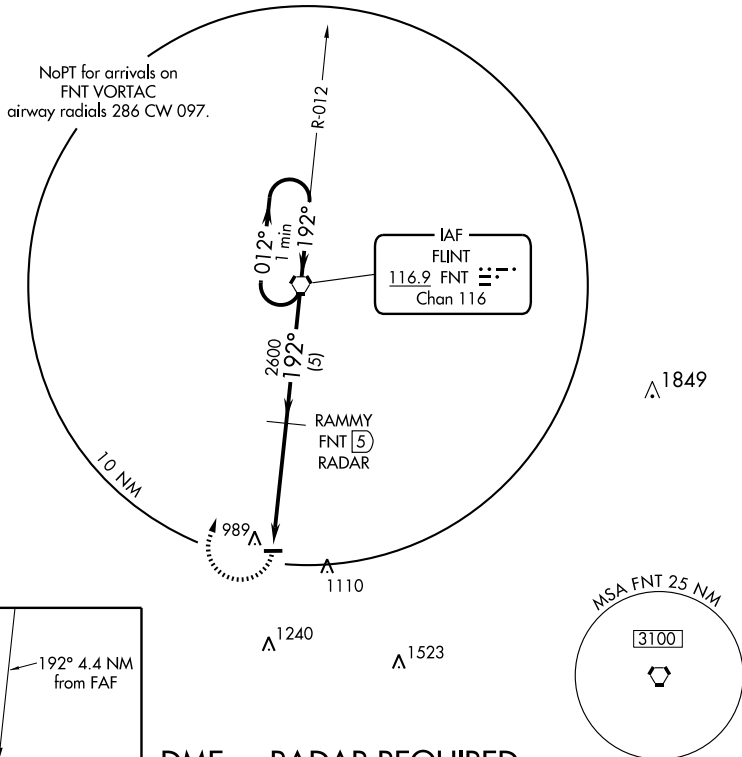


Use Flint altimeter setting.

MISSED APPROACH: Climbing right turn to 2600 direct FNT VORTAC and hold.

FLINT APP CON★
118.8 257.9

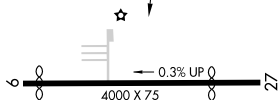
UNICOM
123.0 (CTAF) **L**



ELEV 920

Rwy 9 ldg 3732'
Rwy 27 ldg 3200'

192° 4.4 NM
from FAF

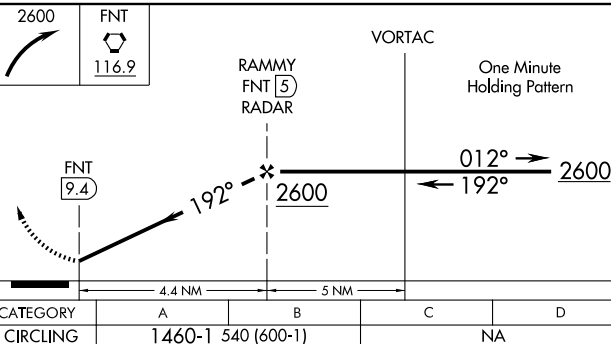


REIL Rwy 9 **L**
MIRL Rwy 9-27 **L**

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

DME or RADAR REQUIRED



LINDEN, MICHIGAN

Orig-A 08185

LINDEN/ PRICE'S (9G2)

VOR-A

42°48'N - 83°46'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

LOWELL CITY (24C) 1 N UTC-5(-4DT) N42°57.24' W85°20.64'

CHICAGO

681 S4 FUEL 100LL NOTAM FILE LAN

RWY 06-24: 2700X100 (TURF)

RWY 06: Thld dsplcd 1100'. Trees.

RWY 24: Thld dsplcd 1200'. Trees.

RWY 12-30: H2394X48 (ASPH) LIRL

RWY 12: Thld dsplcd 603'. Tree.

RWY 30: Thld dsplcd 597'. Tree.

RWY 15-33: 1940X100 (TURF)

RWY 15: Thld dsplcd 582'. Tree.

RWY 33: Thld dsplcd 388'. Tree.

AIRPORT REMARKS: Attended Apr-Oct Mon-Fri 1230-2200Z, Nov-Mar Mon-Fri 1300-2100Z. Snow removal Rwy 12-30 only. Rwy 12-30 extensive cracking length rwy. ACTIVATE LIRL Rwy 12-30—CTAF. Rwy 15-33 and dsplcd thlds marked with three 3' yellow cones. Rwy 06-24 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 123.0

LUCE CO (See NEWBERRY)

LUDINGTON N43°57.77' W86°24.57' NOTAM FILE LDM.

CHICAGO

NDB (MHW) 341 LDM at Mason Co.

L-281

RCO 122.45 (LANSING RADIO)

LUDINGTON

MASON CO (LDM) 2 NE UTC-5(-4DT) N43°57.75' W86°24.48'

CHICAGO

646 B S4 FUEL 100LL, JET A NOTAM FILE LDM

H-2K, L-281

RWY 08-26: H5003X75 (ASPH-PFC) S-25 MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 28'. Trees.

RWY 26: REIL. PAPI(P4L)—GA 3.0° TCH 43'. Trees.

RWY 01-19: H3503X75 (ASPH-PFC) S-19 MIRL

RWY 01: PAPI(P2L).

RWY 19: PAPI(P2L). Trees.

AIRPORT REMARKS: Attended Apr-May 1300-2200Z, Oct-Mar Mon-Fri 1400-2200Z and Sat-Sun 1300-2200Z, Jun-Aug 1300-0100Z, Sep 1300-2200Z. Birds and deer on and in/ovf arpt. ACTIVATE MIRL Rwy 08-26 and Rwy 01-19 PAPI Rwy 08, Rwy 26, Rwy 01 and Rwy 19, and REIL Rwy 26—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.925 (231) 843-0459.

COMMUNICATIONS: CTAF/UNICOM 123.0

MANISTEE RCO 122.1R 111.4T (LANSING RADIO)

LUDINGTON RCO 122.45 (LANSING RADIO)

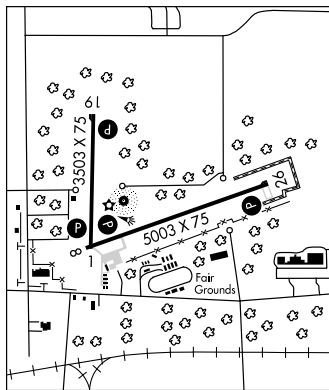
MINNEAPOLIS CENTER APP/DEP CON 120.85

RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 205° 19.6 NM to fld. 618/SW.

LUDINGTON NDB (MHW) 341 LDM N43°57.77' W86°24.57' at fld. NOTAM FILE LDM.



LUZERNE

LOST CREEK (5Y4) 3 NE UTC-5(-4DT) N44°39.60' W84°14.25'

LAKE HURON

1051 NOTAM FILE LAN

RWY 18-36: 2600X100 (TURF)

RWY 18: Thld dsplcd 440'. Trees.

RWY 36: Thld dsplcd 715'. Trees.

RWY 05-23: 2200X100 (TURF)

RWY 05: Thld dsplcd 200'. Trees.

RWY 23: Thld dsplcd 415'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov 14-Apr 15 and when snow covered. Remote ctl model acft ops S end Rwy 05-23. Deer on and in/ovf arpt. Rwy 36 first 200' soft sand. Rwy 05-23 and Rwy 18-36 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

MACKINAC CO (See ST IGNACE)

NDB LDM	APP CRS	Rwy Idg	5003
341	260°	TDZE	645
		Apt Elev	645

NDB RWY 26

LUDINGTON/MASON COUNTY (LDM)

▼ Obtain local altimeter setting on CTAF; when not received, use Muskegon altimeter setting and increase all MDAs 220 feet and all visibilities $\frac{3}{4}$ of a mile.

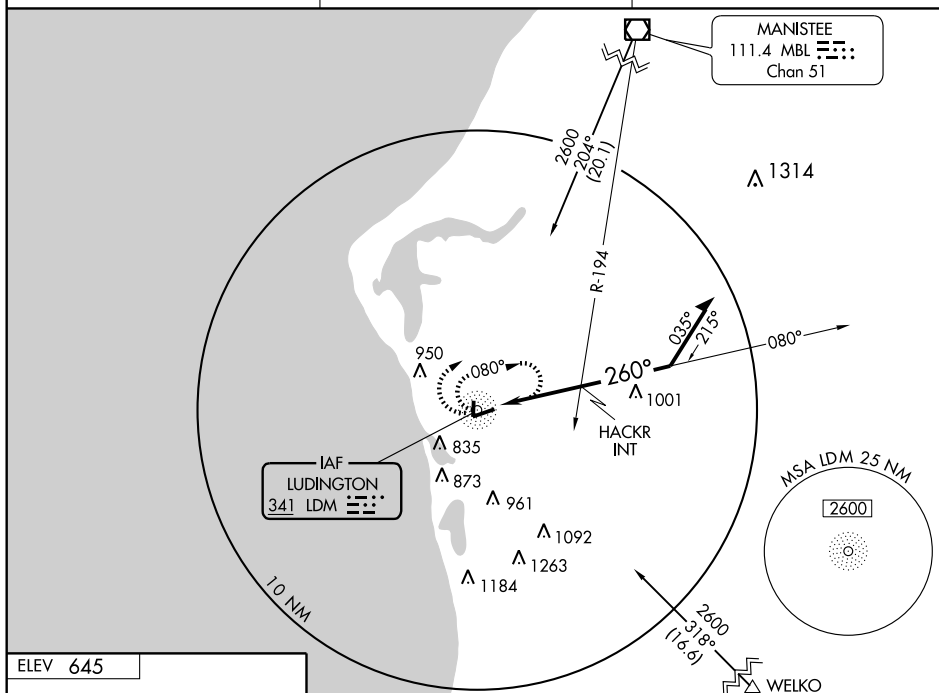
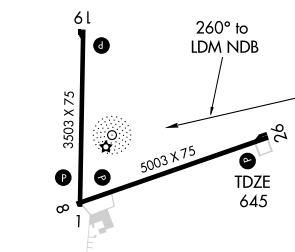
▲ NA

MISSED APPROACH: Climbing right turn to 2500 in LDM NDB holding pattern.

AWOS-3
119.925

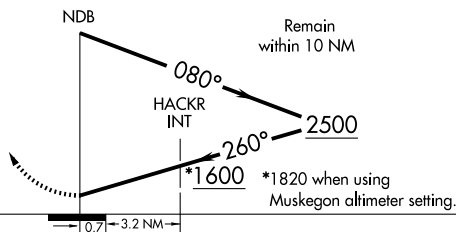
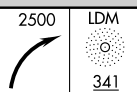
MINNEAPOLIS CENTER
120.85 322.35

UNICOM
123.0 (CTAF) **0**

ELEV **645**

REIL Rwy 26 **0**
MIRL Rwy 8-26 and 1-19 **0**

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-26	1600-1¼ 955 (1000-1¼)	1600-1½ 955 (1000-1½)	1600-3	955 (1000-3)
CIRCLING	1600-1¼ 955 (1000-1¼)	1600-1½ 955 (1000-1½)	1600-3	955 (1000-3)
HACKR FIX MINIMUMS				
S-26	1160-1	515 (600-1)	1160-1½ 515 (600-1½)	1160-1¾ 515 (600-1¾)
CIRCLING	1160-1	515 (600-1)	1200-1½ 555 (600-1½)	1300-2 655 (700-2)

LUDINGTON, MICHIGAN

Orig-A 07018

LUDINGTON/MASON COUNTY (LDM)

43°58'N - 86°24'W

NDB RWY 26

APP CRS **074°**
 Rwy Ldg **5003**
 TDZE **643**
 Apt Elev **646**

RNAV (GPS) RWY 8
 LUDINGTON/MASON COUNTY (LDM)

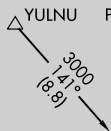
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon County altimeter setting and increase all MDAs 120 feet, increase LNAV and circling visibility Cat C/D ½ mile.

MISSED APPROACH: Climb to 3000 direct CEYNA and via 152° track to WELKO and hold.

AWOS-3
119.925

MINNEAPOLIS CENTER
120.85 322.35

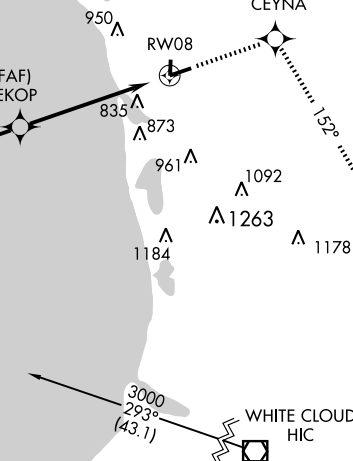
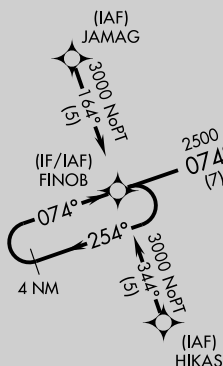
UNICOM
123.0 (CTAF)



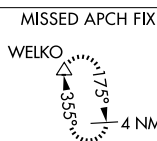
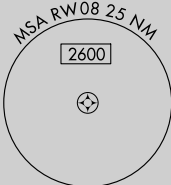
Procedure NA for arrivals at YULNU via V55 NW Bnd.



Procedure NA for arrivals at MBL VOR/DME via V271 N Bnd.

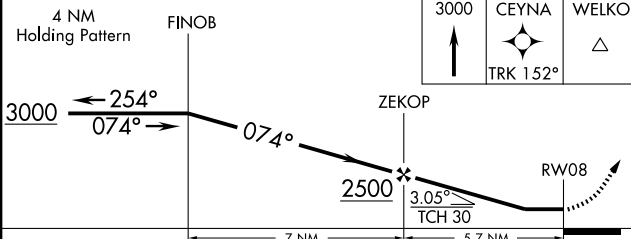


Procedure NA for arrivals on HIC VOR/DME airway radials 303 CW 332.

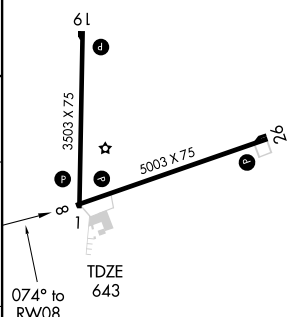


ELEV **646**

4 NM
 Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1140-1	497 (500-1)	1140-1¼ 497 (500-1¼)	1140-1½ 497 (500-1½)
CIRCLING	1160-1	514 (600-1)	1200-1½ 554 (600-1½)	1300-2 654 (700-2)



REIL Rwy 26
 MIRL Rlys 8-26 and 1-19

WAAS CH 49206 W26A	APP CRS 254°	Rwy Idg TDZE Apt Elev	5003 646 646
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 26

LUDINGTON/ MASON COUNTY (LDM)

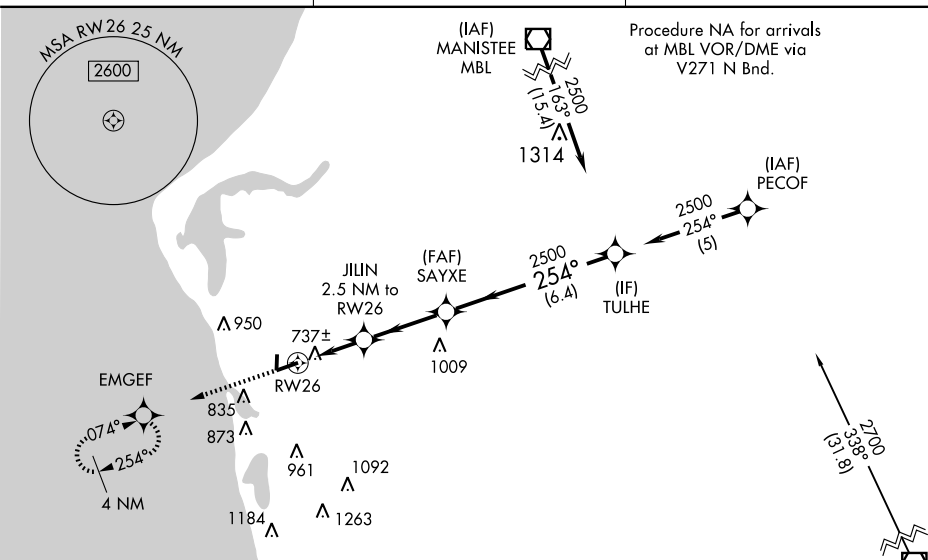
Baro-VNAV NA when using Muskegon altimeter setting. For uncompensated Baro-VNAV systems, procedure NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon County altimeter setting and increase DAs and MDAs 120 feet and increase LPV visibility ¼ mile all Cats, increase LNAV/VNAV visibility ½ mile all Cats, increase LNAV Cat C/D visibility ¼ mile, increase circling Cat C/D visibility ½ mile.

MISSED APPROACH: Climb to 2500 direct EMGEF and hold.

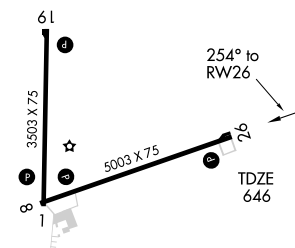
AWOS-3
119.925

MINNEAPOLIS CENTER
120.85 322.35

UNICOM
123.0 (CTAF) 0

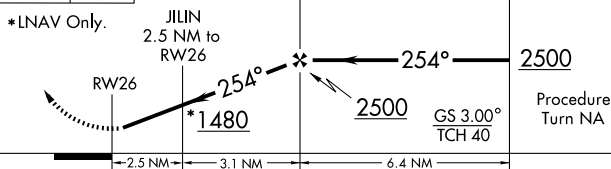


ELEV **646**



2500
↑
EMGEF

*LNAV Only.



CATEGORY	A	B	C	D
LPV DA	975-1¼	329 (400-1¼)		
LNAV/VNAV DA	1020-1¼	374 (400-1¼)		
LNAV MDA	1000-1	354 (400-1)	1000-1¼	354 (400-1¼)
CIRCLING	1160-1	514 (600-1)	1200-1½	1300-2
			554 (600-1½)	654 (700-2)

REIL Rwy 26 0
MIRL Rwy 8-26 and 1-19 0

MACKINAC ISLAND (MCD) 1 NW UTC-5(-4DT) N45°51.90' W84°38.24'

LAKE HURON

739 B TPA-1900 (1159) NOTAM FILE MCD

L-31B

RWY 08-26: H3500X75 (ASPH) S-13 MIRL 0.4% up NE

IAP

RWY 08: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 26: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Trees.

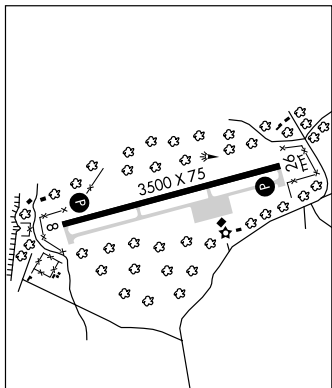
AIRPORT REMARKS: Attended 1300-2200Z+. Noise abatement procedures: Tfc pattern altitude 1900' MSL; climb to 1900' MSL before turning; avoid flight over shore and town; no touch and go lds. Birds on and in/ovf arpt. Flocks of seagulls in/ovf landfill 0.3 miles NE. Rwy 08-26 slopes up from E to W. Ldg fee. **ACTIVATE** MIRL Rwy 08-26 and PAPI Rwy 08 and 26 and REIL Rwy 08 and 26—122.8.

WEATHER DATA SOURCES: AWOS-3 118.275 (906) 847-3778.**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 011° 14.1 NM to fld. 840/6W. **HIWAS.****COMM/NAV/WEATHER REMARKS:** AWOS-3 visibility unreliable.**MACKINAC ISLAND** N45°53.48' W84°44.09'

LAKE HURON

RCO 122.35 (GREEN BAY RADIO) at Mackinac Co.

L-31B

MADDS N42°29.69' W83°05.60' NOTAM FILE DET.

DETROIT

NDB (LOM) 338 DE 149° 6.3 NM to Coleman A. Young Muni. Unmonitored.

MAIDENS (See WILLIAMSTON)**MALLY** N42°07.61' W86°18.80' NOTAM FILE BEH.

CHICAGO

NDB (LOM) 397 BE 274° 5.1 NM to Southwest Michigan Rgnl. Unmonitored.

MANCELONA MUNI (D90) 2 N UTC-5(-4DT) N44°55.50' W85°04.00'

GREEN BAY

1133 NOTAM FILE LAN

RWY 18-36: 3400X140 (TURF)

RWY 18: Trees. RWY 36: Tree.

RWY 10-28: 2050X120 (TURF)

RWY 10: Thld dspcd 830'. Trees. RWY 28: Thld dspcd 200'. Tree.

AIRPORT REMARKS: Unattended. Arpt CLOSED when snow covered and Nov thru Apr 15 rwy not plowed. Rwy 18-36 marked with 3' yellow cones. Rwy 10-28 marked with tires.

COMMUNICATIONS: CTAF 122.9**MANCHESTER****ROSSETTIE** (75G) 3 N UTC-5(-4DT) N42°11.70' W84°01.85'

DETROIT

1005 NOTAM FILE LAN

COPTER

RWY 18-36: 2480X100 (TURF) LIRL (NSTD)

RWY 18: Trees. RWY 36: Thld dspcd 665'. Road. Rgt tfc.

AIRPORT REMARKS: Attended irregularly. Field gets muddy in spring. Rwy on rolling terrain. Rwy 18-36 NSTD LIRL due to spacing. Rwy 18-36 marked with 2' yellow cones and painted tires.

COMMUNICATIONS: CTAF 122.9**MANISTEE** N44°16.24' W86°15.24' NOTAM FILE MBL.

GREEN BAY

(L) VOR/DME 111.4 MBL Chan 51 at Manistee Co-Blacker. 618/5W. **AWOS-3.**

L-281, 31B

VOR unusable 140°-165° byd 20 NM below 5000'. DME unusable 320°-070° byd 20 NM below 3000'.

RCO 122.1R 111.4T (LANSING RADIO)

VORTAC PLN 111.8 Chan 55	APP CRS 012°	Rwy Idg TDZE Apt Elev 740	N/A N/A 740
--	------------------------	---	--------------------------

VOR/DME or GPS-A

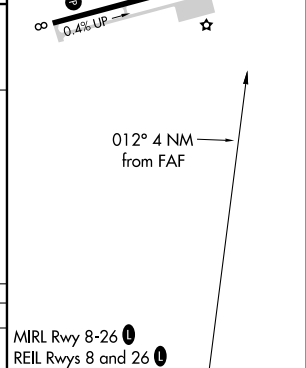
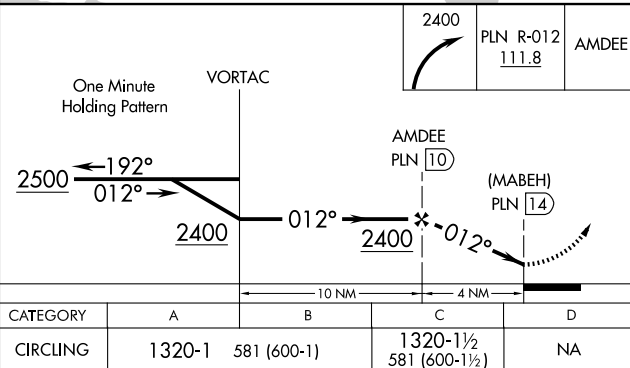
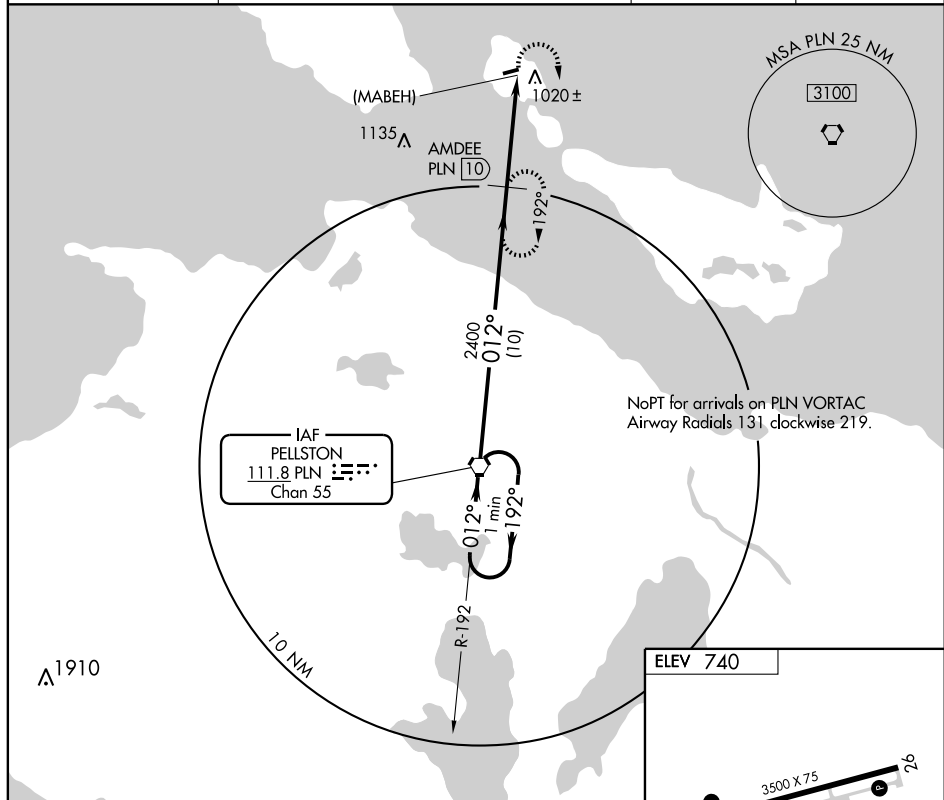
MACKINAC ISLAND (MCD)

▼ Use Mackinac Island altimeter setting. If not available, use Pellston altimeter setting and increase all MDAs 80 feet; if neither are available, procedure not authorized.

▲ NA

MISSED APPROACH: Climbing right turn to 2400 via PLN R-012 to AMDEE 10 DME and hold.

AWOS-3 118.275	MINNEAPOLIS CENTER 134.6 354.05	UNICOM 122.7 (CTAF)	122.8 !
--------------------------	---	-------------------------------	-----------------------



MANISTEE CO—BLACKER (MBL) 3 NE UTC-5(-4DT) N44°16.35' W86°14.81'

621 B S2 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MBL

GREEN BAY

H-2K, L-281, 31B

IAP

RWY 09-27: H5500X100 (ASPH) S-26, D-31 HIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

RWY 18-36: H2721X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 36: PAPI(P2L)—GA 4.0° TCH 26'. Tree.

AIRPORT REMARKS: Attended Apr-Oct 1300-0100Z† Nov-Mar 1300-2200Z†. Deer and birds on and in/ov arpt. ARFF unavbl exc air carrier, others 24 hr PPR 231-723-4351. ARFF monitoring CTAF during air carrier ops. Part 139 certified for scheduled air carriers 10-30 seats only. Unscheduled air carriers over 30 seats not authorized. Maintenance personnel monitoring CTAF during work on twys and rwys. Twys marked with reflectors. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36, REIL Rwy 09, PAPI Rwys 09, 18, 27 and 36—CTAF.

WEATHER DATA SOURCES: AWOS-3 111.4 MBL (231) 723-6073.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 111.4T (LANSING RADIO)

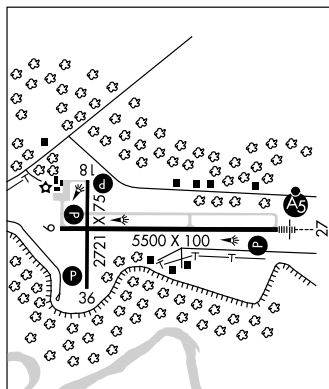
RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

(L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' at fld. 618/5W. AWOS-3.

JEPOT NDB (LOM) 254 MB N44°16.25' W86°08.57' 276° 4.5NM to fld.

ILS 108.35 I-MBL Rwy 27. LOM JEPOT NDB. Unmonitored 0100-1300Z†.

**MANISTIQUE****SCHOOLCRAFT CO** (ISQ) 3 NE UTC-5(-4DT) N45°58.48' W86°10.31'

684 B FUEL 100LL, JET A NOTAM FILE ISQ

GREEN BAY

H-2K, L-31B

IAP

RWY 10-28: H5001X100 (ASPH) S-26 D-45 MIRL

RWY 10: PAPI(P2L)—GA 3.0° TCH 35'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.

RWY 01-19: H2501X50 (ASPH) S-26, D-45

RWY 01: Trees. RWY 19: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-2200Z†, Sat-Sun 1330-2300Z†. For arpt attendance call 906-341-5522 during attendance hrs; or 906-341-0515 after hours (manager residence). Birds and deer on and in/ov arpt. Rwy 19 +100' unmarked p-line 1 mile north of rwy end. Rwy 10 PAPI OTS indef. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Rwy 28 south side REIL OTS indef.

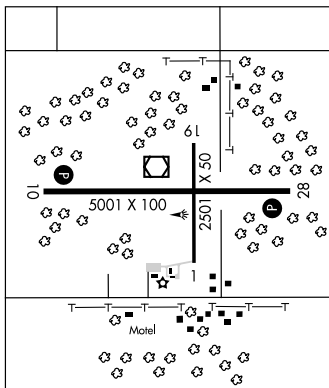
WEATHER DATA SOURCES: AWOS-3 110.4 ISQ (906) 341-8585.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (GREEN BAY RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE ISQ.

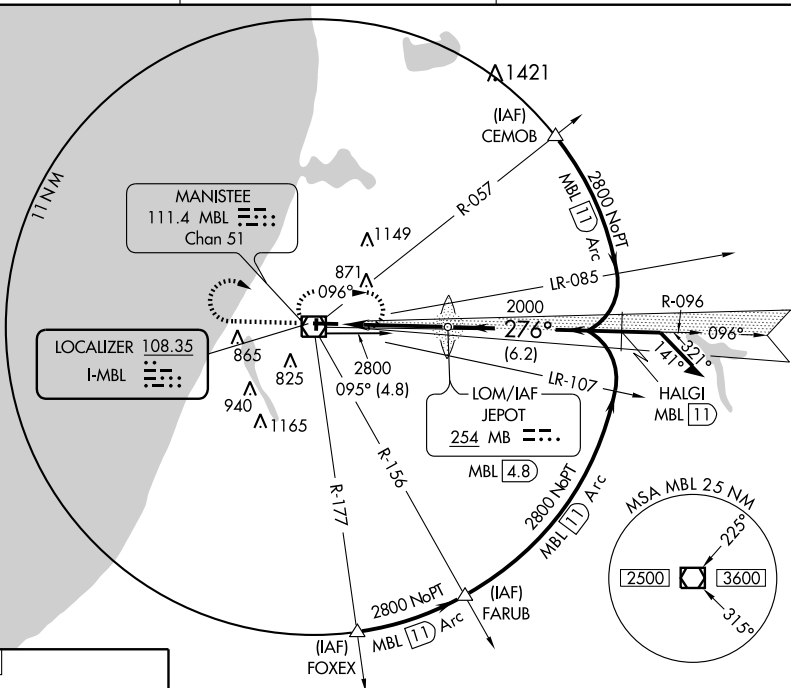
(L) VOR/DME 110.4 ISQ Chan 41 N45°58.58'

W86°10.41' at fld. 680/5W. AWOS-3.

**MAPLE GROVE** (See FOWLerville)**MARE GROVE HELIPORT** (See FOWLerville)

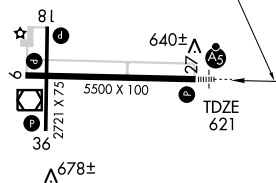
LOC I-MBL
108.35APP CRS
276°Rwy Idg **5500**
TDZE **621**
Apt Elev **621****ILS or LOC RWY 27**
MANISTEE COUNTY-BLACKER (MBL)

MISSED APPROACH: Climb to 1500 then climbing right turn to 2800 direct MBL VOR/DME and hold.

AWOS-3
111.4LANSING RADIO
122.1RUNICOM
122.8 (CTAF) 0

ELEV 621

A 727 ±

276° 3.9 NM
from FAF

HIRL Rwy 9-27 0

MIRL Rwy 18-36 0

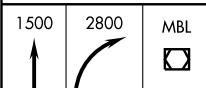
REIL Rwy 9 0

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

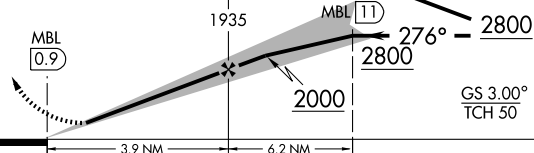
MANISTEE, MICHIGAN

Orig-B 26AUG10



JEPOT LOM MBL 4.8

VGS and ILS glidepath not coincident.

Remain
within 10 NM

CATEGORY	A	B	C	D
S-ILS 27	821-½ 200 (200-½)			
S-LOC 27	1080-½ 459 (500-½)		1080-¾ 459 (500-¾)	1080-1 459 (500-1)
CIRCLING	1120-1 499 (500-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)

MANISTEE COUNTY-BLACKER (MBL)

ILS or LOC RWY 27

44°16'N - 86°15'W

VOR/DME MBL 111.4 Chan 51	APP CRS 110°	Rwy Idg TDZE Apt Elev 5500 621 621
---	------------------------	--

VOR RWY 9

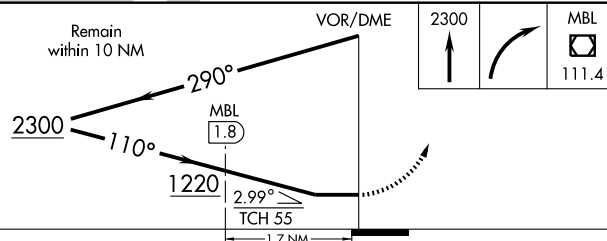
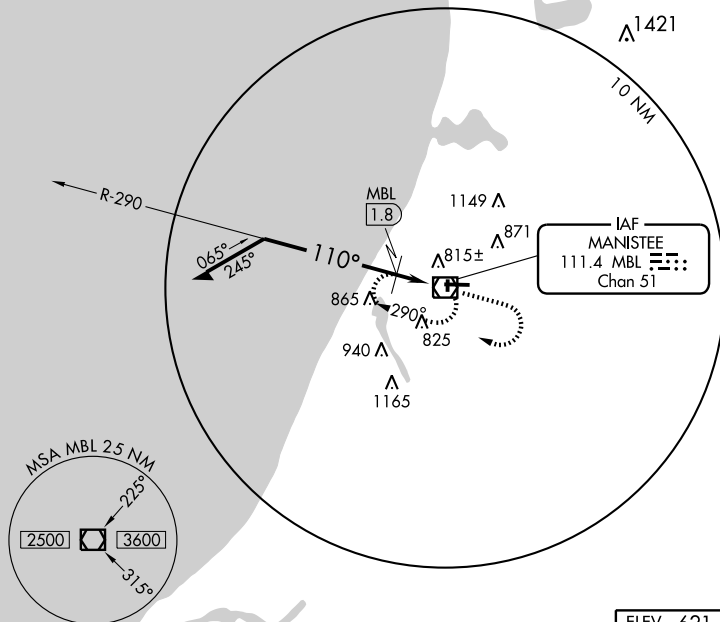
MANISTEE COUNTY-BLACKER (MBL)

MISSED APPROACH: Climb to 2300, then
right turn direct MBL VOR/DME and hold.

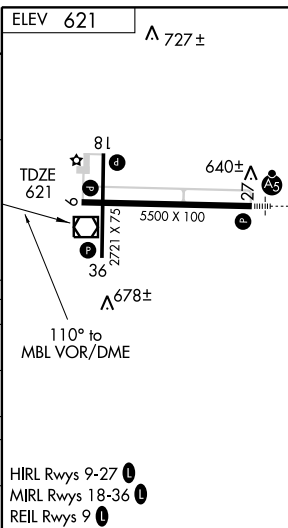
AWOS-3
111.4

LANSING RADIO
122.1R

UNICOM
122.8 (CTAF) **1**



CATEGORY	A	B	C	D
S-9	1220-1	599 (600-1)	1220-1½ 599 (600-1½)	1220-1¾ 599 (600-1¾)
CIRCLING	1220-1	599 (600-1)	1220-1½ 599 (600-1½)	1300-2¼ 679 (700-2¼)
DME MINIMUMS				
S-9	1080-1	459 (500-1)	1080-1¼ 459 (500-1¼)	1080-1½ 459 (500-1½)
CIRCLING	1120-1 499 (500-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)



HIRL Rwy 9-27 **1**
MIRL Rwy 18-36 **1**
REIL Rwy 9 **1**

VOR/DME MBL 111.4 Chan 51	APP CRS 271°	Rwy Idg 5500 TDZE 621 Apt Elev 621
---	------------------------	---

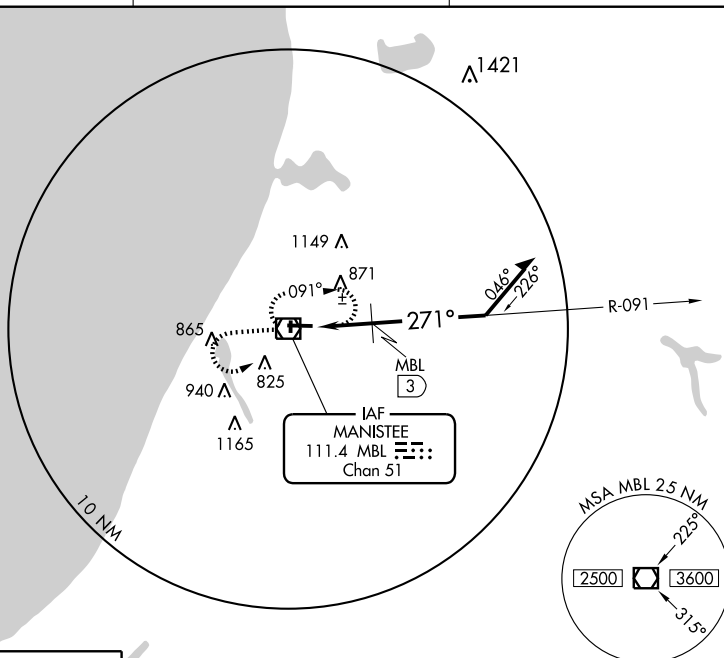
VOR RWY 27
MANISTEE COUNTY-BLACKER (MBL)

MALSR

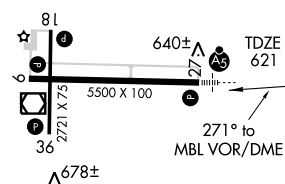
MISSED APPROACH: Climb to 2300, then left turn direct MBL VOR/DME and hold.

AWOS-3
111.4

LANSING RADIO
122.1 R

UNICOM
122.8 (CTAF) **L**

ELEV 621

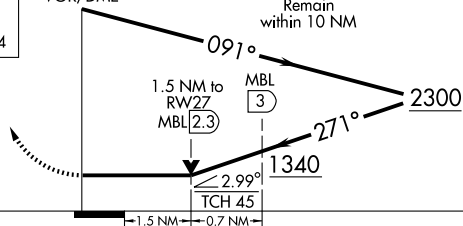
 $\Delta 727+$ 

2300

MBL

VOR/DME

Remain
within 10 NM



CATEGORY	A	B	C	D
S-27	1340-½ 719 (800-½)		1340-1½ 719 (800-1½)	1340-1¾ 719 (800-1¾)
CIRCLING	1340-1 719 (800-1)		1340-2 719 (800-2)	1340-2½ 719 (800-2½)
DME MINIMUMS				
S-27	1140-½ 519 (600-½)		1140-1 519 (600-1)	1140-1¼ 519 (600-1¼)
CIRCLING	1140-1 519 (600-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)

MANISTEE, MICHIGAN

Orig-A 08269

MANISTEE COUNTY-BLACKER (MBL)

VOR RWY 27

44°16'N - 86°15'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

MANISTEE CO—BLACKER (MBL) 3 NE UTC-5(-4DT) N44°16.35' W86°14.81'

GREEN BAY

621 B S2 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MBL

H-2K, L-281, 31B

RWY 09-27: H5500X100 (ASPH) S-26, D-31 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

RWY 18-36: H2721X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 36: PAPI(P2L)—GA 4.0° TCH 26'. Tree.

AIRPORT REMARKS: Attended Apr-Oct 1300-0100Z† Nov-Mar 1300-2200Z†. Deer and birds on and in/ov arpt. ARFF unavbl exc air carrier, others 24 hr PPR 231-723-4351. ARFF monitoring CTAF during air carrier ops. Part 139 certified for scheduled air carriers 10-30 seats only. Unscheduled air carriers over 30 seats not authorized. Maintenance personnel monitoring CTAF during work on twys and rwys. Twys marked with reflectors. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36, REIL Rwy 09, PAPI Rwys 09, 18, 27 and 36—CTAF.

WEATHER DATA SOURCES: AWOS-3 111.4 MBL (231) 723-6073.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 111.4T (LANSING RADIO)

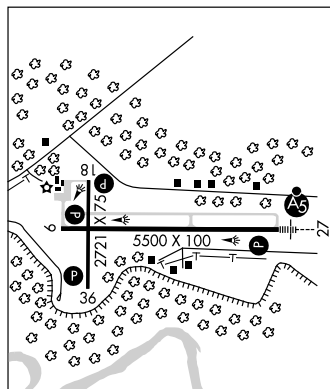
RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

(L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' at fld. 618/5W. AWOS-3.

JEPOT NDB (LOM) 254 MB N44°16.25' W86°08.57' 276° 4.5NM to fld.

ILS 108.35 I-MBL Rwy 27. LOM JEPOT NDB. Unmonitored 0100-1300Z†.

**MANISTIQUE****SCHOOLCRAFT CO** (ISQ) 3 NE UTC-5(-4DT) N45°58.48' W86°10.31'

GREEN BAY

684 B FUEL 100LL, JET A NOTAM FILE ISQ

H-2K, L-31B

RWY 10-28: H5001X100 (ASPH) S-26 D-45 MIRL

IAP

RWY 10: PAPI(P2L)—GA 3.0° TCH 35'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.

RWY 01-19: H2501X50 (ASPH) S-26, D-45

RWY 01: Trees. RWY 19: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-2200Z†, Sat-Sun 1330-2300Z†. For arpt attendance call 906-341-5522 during attendance hrs; or 906-341-0515 after hours (manager residence). Birds and deer on and in/ov arpt. Rwy 19 +100' unmarked p-line 1 mile north of rwy end. Rwy 10 PAPI OTS indef. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Rwy 28 south side REIL OTS indef.

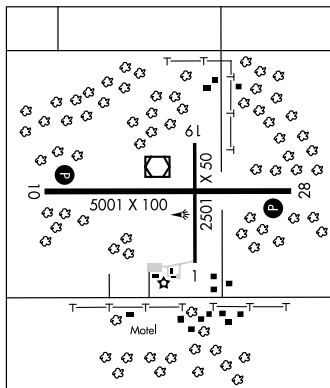
WEATHER DATA SOURCES: AWOS-3 110.4 ISQ (906) 341-8585.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (GREEN BAY RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE ISQ.

(L) VOR/DME 110.4 ISQ Chan 41 N45°58.58'

W86°10.41' at fld. 680/5W. AWOS-3.

**MAPLE GROVE** (See FOWLerville)**MARE GROVE HELIPORT** (See FOWLerville)

VOR/DME ISQ
110.4
Chan **41**

APP CRS
280°

Rwy Idg
TDZE
Apt Elev

5001
684
685

VOR or GPS RWY 28

MANISTIQUE/ SCHOOLCRAFT COUNTY (ISQ)

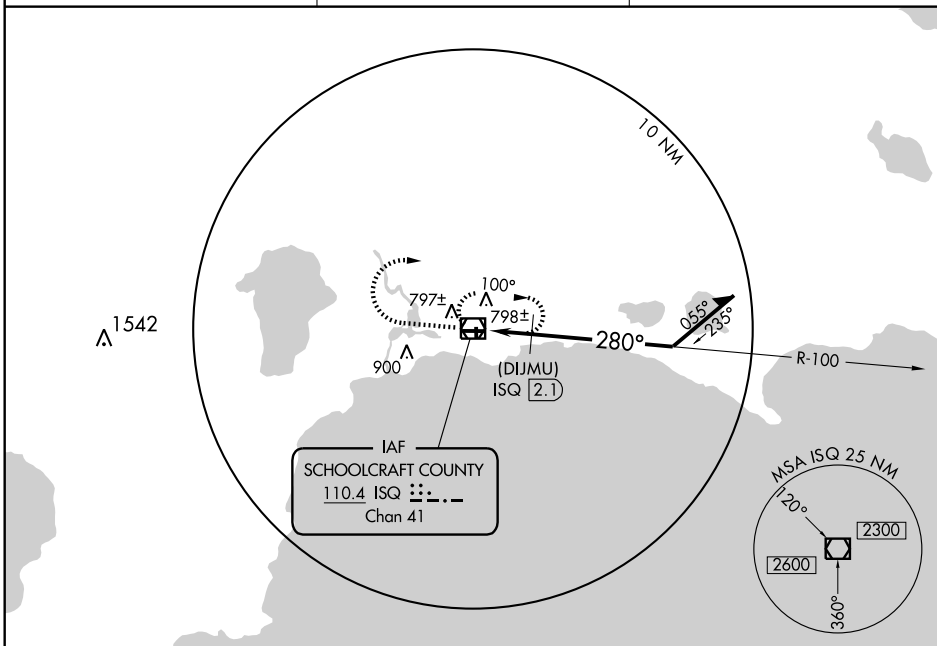
NA Obtain local altimeter setting on CTAF, when not received, use Escanaba altimeter setting and increase all MDA's 100 feet, and visibility Cats. C and D ¼ mile.

MISSED APPROACH: Climb to 2300, then right turn direct ISQ VOR/DME and hold.

AWOS-3
110.4

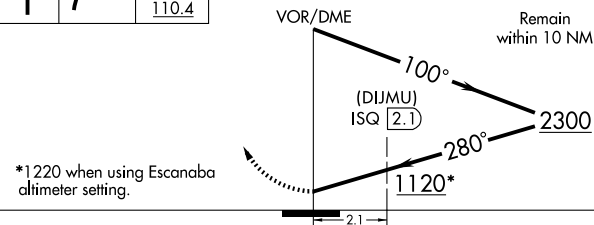
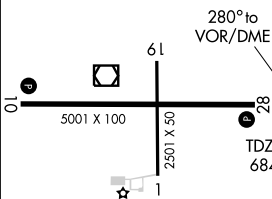
GREEN BAY RADIO
122.25

UNICOM
122.8 (CTAF) **0**



ELEV **685**

2300
↑
ISQ
110.4



*1220 when using Escanaba altimeter setting.

CATEGORY	A	B	C	D
S-28	1120 - 1	436 (500-1)	1120 - 1¼ 436 (500-1¼)	1120 - 1½ 436 (500-1½)
CIRCLING	1120 - 1 435 (500-1)	1140 - 1 455 (500-1)	1140 - 1½ 455 (500-1½)	1260 - 2 575 (600-2)
DME MINIMUMS				
S-28	1060 - 1 376 (400-1)			1060 - 1¼ 376 (400-1¼)
CIRCLING	1120 - 1 435 (500-1)	1140 - 1 455 (500-1)	1140 - 1½ 455 (500-1½)	1260 - 2 575 (600-2)

REIL Rwy 28 **0**
MIRL Rwy 10-28 **0**

MANISTIQUE, MICHIGAN

Orig-A 09127

MANISTIQUE/ SCHOOLCRAFT COUNTY (ISQ)

45°58'N - 86°10'W

VOR or GPS RWY 28

MARINE CITY (76G) 4 W UTC-5(-4DT) N42°43.25' W82°35.75'DETROIT
L-30F

613 B S4 FUEL 100LL JET A TPA-1413(800) NOTAM FILE LAN

RWY 04-22: H3100X60 (ASPH) MIRL (NSTD)

RWY 04: REIL. PAPI(P2L)—GA 4.0° TCH 25'. P-line.

RWY 22: PAPI(P2L)—GA 4.0° TCH 25'. Thld dsplcd 295'. Brush.

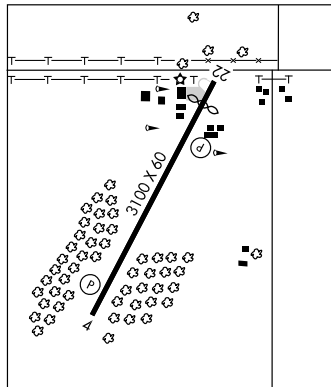
AIRPORT REMARKS: Attended continuously. Rwy 04-22 NSTD MIRL lctd 23' from rwy edge.

COMMUNICATIONS: CTAF/UNICOM 123.0

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.36'

W82°43.08' 177° 32.5 NM to fld. 810/7W. HIWAS.

**MARLETTE** (77G) 1 SW UTC-5(-4DT) N43°18.71' W83°05.46'DETROIT
L-28J
IAP

895 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3796X75 (ASPH) MIRL (NSTD)

RWY 09: PAPI(P4R)—GA 3.0° TCH 20'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 20'. Trees.

RWY 01-19: H3497X75 (ASPH) MIRL 0.7% up N

RWY 01: PAPI(P4L)—GA 3.0° TCH 20'.

RWY 19: PAPI(P4L)—GA 3.0° TCH 20'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z. Glider ops on and invof arpt. Rwy 09-27 NSTD MIRL; lgts last 2000' not split amber/white lens. ACTIVATE MIRL Rwy 01-19 and Rwy 09-27; PAPI and REIL Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

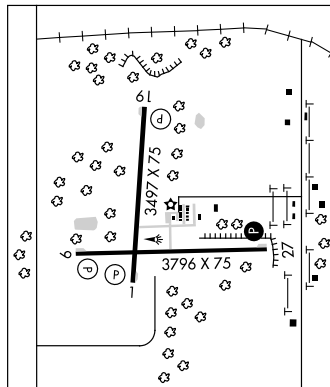
PECK RCO 122.1R 114.0T (LANSING RADIO)

® CLEVELAND CENTER APP/DEP CON 127.7

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35'

W82°43.08' 289° 16.7 NM to fld. 810/7W. HIWAS.



APP CRS	Rwy Idg	3796
094°	TDZE	881
	Apt Elev	895

RNAV (GPS) RWY 9

MARLETTE (77G)

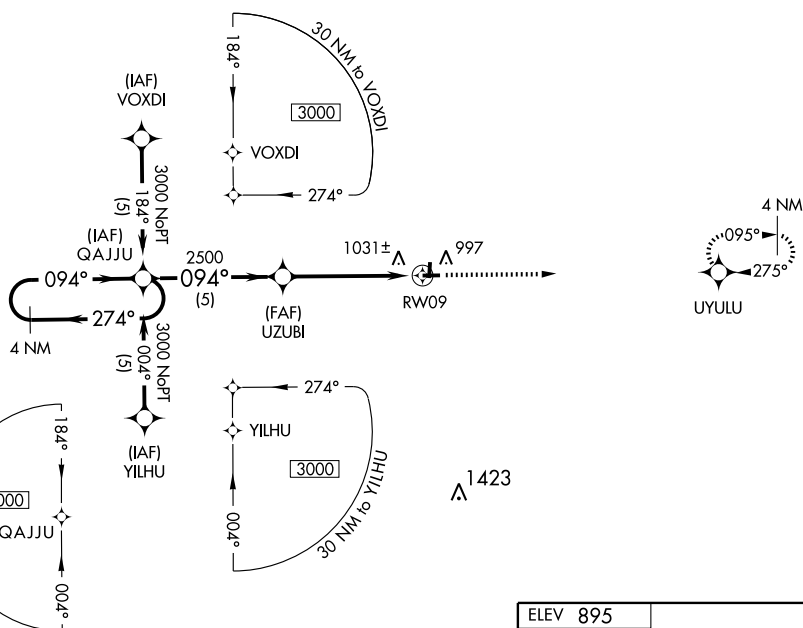


Use Flint altimeter setting.
DME/DME RNP-0.3 NA.

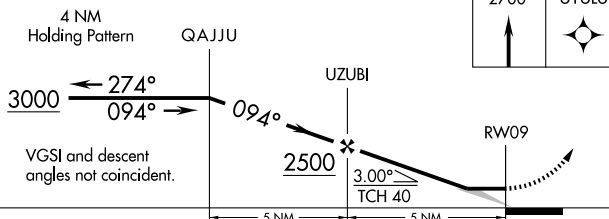
MISSED APPROACH: Climb to
2700 direct UYULU WP and hold.

CLEVELAND CENTER
127.7 307.8

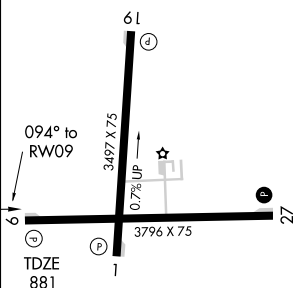
UNICOM
122.8 (CTAF) 0



ELEV 895



2700 UYULU



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	1440-1 559 (600-1)	1440-1½ 559 (600-1½)	1440-1¾ 559 (600-1¾)	
CIRCLING	1480-1 585 (600-1)	1480-1½ 585 (600-1½)	1480-2 585 (600-2)	

REIL Rwy 27 0
MIRL Rwy 1-19 and 9-27 0

APP CRS **275°**
 Rwy ldg **3796**
 TDZE **881**
 Apt Elev **895**

RNAV (GPS) RWY 27

MARLETTE (77G)

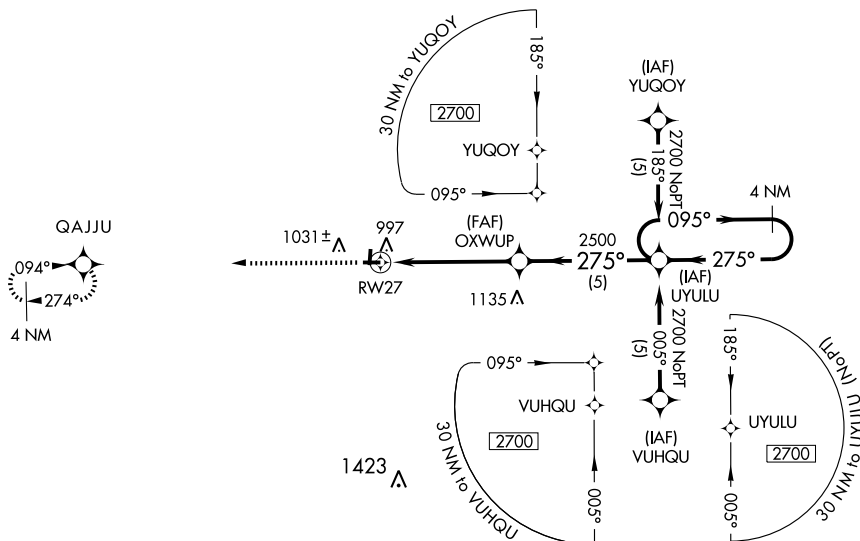


Use Flint altimeter setting.
 DME/DME RNP-0.3 NA.

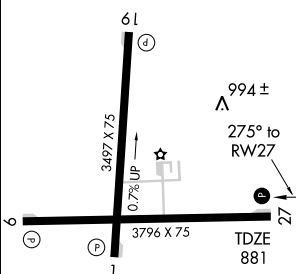
MISSED APPROACH: Climb to
 3000 direct QAJJU WP and hold.

CLEVELAND CENTER
127.7 307.8

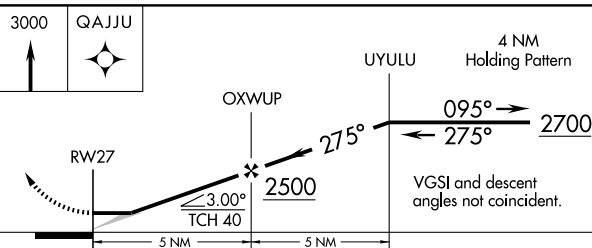
UNICOM
122.8 (CTAF) 0



ELEV **895**



REIL Rwy 27 **0**
 MRL Rwy 1-19 and 9-27 **0**



CATEGORY	A	B	C	D
GLS PA DA	NA			
INAV/ VNAV DA	NA			
INAV MDA	1440-1	559 (600-1)	1440-1½ 559 (600-½)	1440-1¾ 559 (600-¼)
CIRCLING	1480-1	585 (600-1)	1480-1½ 585 (600-½)	1480-2 585 (600-2)

MARLETTE, MICHIGAN

Orig-B 03JUN10

43°19'N - 83°05'W

MARLETTE (77G)
RNAV (GPS) RWY 27

VORTAC ECK 114.0 Chan 87	APP CRS 289°	Rwy Idg TDZE Apt Elev	N/A N/A 895
--	------------------------	-----------------------------	--

VOR/DME or GPS-A

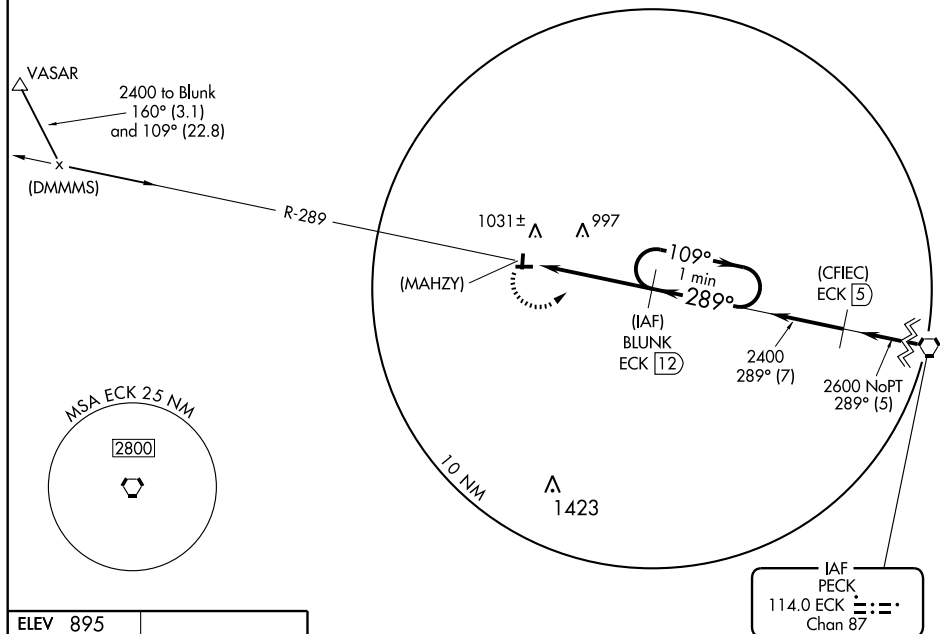
MARLETTE (77G)

NA Use Flint altimeter setting.

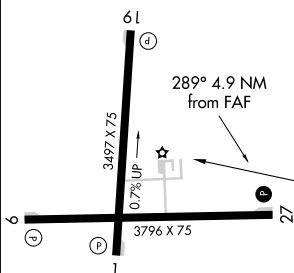
MISSED APPROACH: Climbing left turn to 2400
via ECK R-289 to BLUNK 12 DME and hold.

CLEVELAND CENTER
127.7 307.8

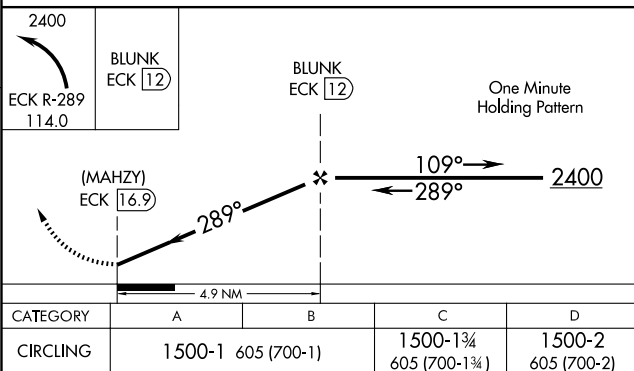
UNICOM
122.8 (CTAF) **0**



ELEV 895



REIL Rwy 27 **0**
MIRL Rwys 1-19 and 9-27 **0**



MARLETTE, MICHIGAN

Amdt 5A 09127

43°19'N - 83°05'W

VOR/DME or GPS-A

MARLETTE (77G)

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

AL-773 (FAA)

MARQUETTE/ SAWYER INTL (SAW)
MARQUETTE, MICHIGAN

AWOS-3

118.375

SAWYER TOWER ★

119.975

GND CON

121.65

D

87°24'W

87°23'W

FIELD
ELEV
1221

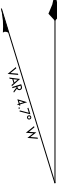
61

193.7°

0.4% DOWN

12366 X 150

46°22'N

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W

RWY 01-19

S-75, D-175, 2S-175, 2D-490

46°21'N

CONTROL
TOWER

FIRE STATION

PASSENGER
TERMINALELEV
1179

013.7°

GENERAL
AVIATION
TERMINAL

46°20'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

MARQUETTE, MICHIGAN
MARQUETTE/ SAWYER INTL (SAW)

MARQUETTE

SAWYER INTL

(SAW) 17 S UTC-5(-4DT) N46°21.22' W87°23.72'

GREEN BAY

1221 B S4 FUEL 100LL, JET A OX 1,2 LRA ARFF Index—See Remarks
 RWY 01-19: H12366X150 (ASPH-CONC-GRVD) S-75, D-175, 2S-175, 2D-490

NOTAM FILE SAW
 HIRL

H-21, L-31A
 IAP, AD

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 66'.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 62'. 0.4% down.

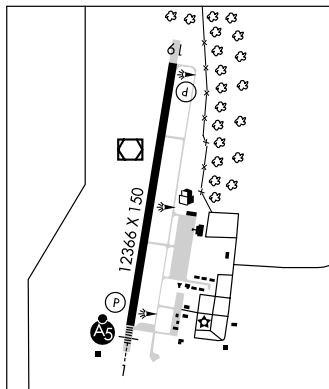
RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

RWY 19: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

AIRPORT REMARKS: Attended 1000-0100Z±. For svc after hrs call

906-222-3062 (pager). Fuel avbl 24 hrs with credit card, multi-svc and av card. Self svc fuel located adjacent FBO ramp. FBO svc after hrs contact 906-222-3062. Birds and deer on and invof arpt. PAEW on arpt monitor 119.975 (CTAF). Class I, ARFF Index D avbl. Call arpt mgr at 906-458-6336 to confirm availability of personnel and equipment. Air carrier ops involving acft with more than 30 passenger seats are not authorized in excess of 15 minutes before or after scheduled arrival/dep times without prior coordination with arpt manager. 48 hrs prior to unscheduled air carrier operations with more than 30 passenger seats call arpt manager 906-458-6336. General aviation and charter acft parking avbl at general aviation terminal only, lctd SE corner of arpt. North entrance to air carrier ramp, south of ARFF/SRE building, closed Nov-Mar. S half of air carrier terminal ramp not plowed Oct-Apr. Frequent snow removal ops in progress various times Oct-Apr. Monitor CTAF. Twy A north of Twy C clsd 15 Nov-15 Apr. Twy B clsd 15 Nov-15 Apr. Twy G clsd 15 Nov-15 Apr. North air carrier ramp entrance/exit clsd 15 Nov-15 Apr. ACTIVATE HIRL Rwy 01-19, MALSR Rwy 01 and REIL Rwy 19—119.975. All lighting pilot controlled CTAF 119.975 when ATCT closed. Rwy 01-19 75' paved shoulders each side. Ramp fees in effect. Ramp fees may be waived with fuel purchase. FBO svc after hrs ctc 906-222-3062 (pager).



WEATHER DATA SOURCES: AWOS-3 118.375 (906) 346-5126.

COMMUNICATIONS: CTAF 119.975 UNICOM 122.7

SAWYER RCO 123.6 (GREEN BAY RADIO)

R MINNEAPOLIS CENTER APP/DEP CON 119.1

SAWYER TOWER 119.975 (1100-0300Z±) GND CON 121.65

AIRSPACE: CLASS D svc 1100-0300Z± other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE SAW.

(H) VOR/DME 117.1 SAW Chan 118 N46°21.54' W87°23.85' at fld. 1196/4W.

VOR portion unusable 330°-090° byd 10 NM blo 8000'. DME unusable 250°-090° byd 30 NM blo 4500'.

SUOMI NDB (LOM) 410 SO N46°15.71' W87°24.97' 013° 5.6NM to fld.

ILS 110.1 I-SOU Rwy 01. Class IE. LOM SUOMI NDB. ILS unmonitored.

COMM/NAV/WEATHER REMARKS: No emergency frequencies at twr.

LOC I-SOU <u>110.1</u>	APP CRS 013°	Rwy Idg 12366 TDZE 1180 Apt Elev 1221
----------------------------------	------------------------	--

ILS or LOC RWY 1

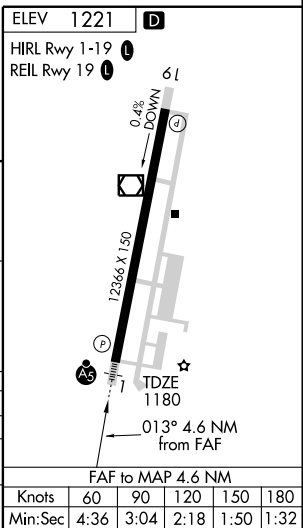
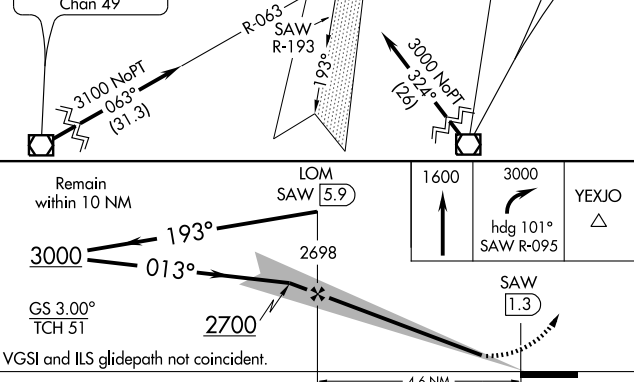
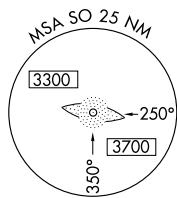
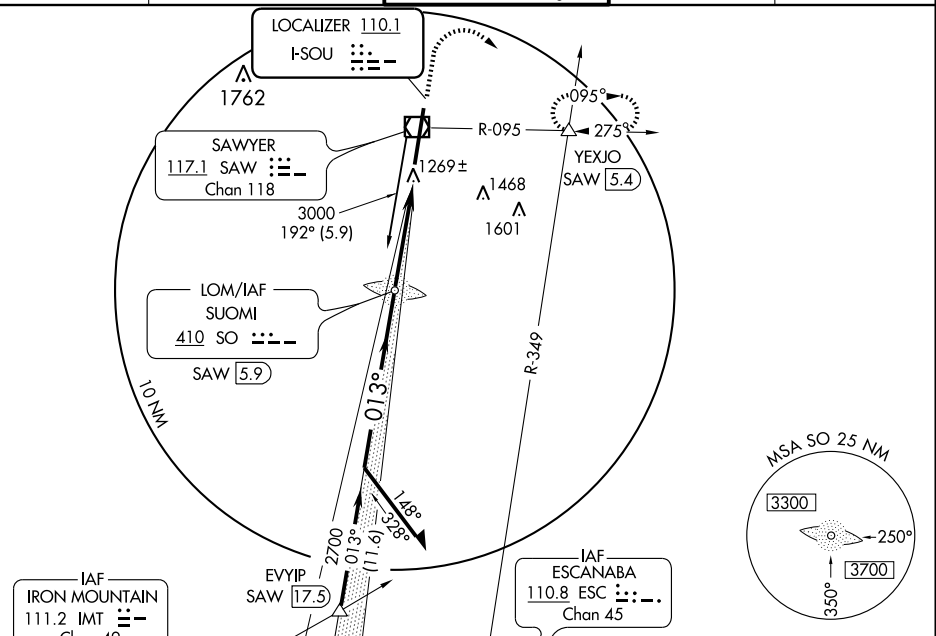
MARQUETTE/ SAWYER INTL (SAW)

T Autopilot coupled approach NA below 1360 MSL. When local altimeter setting not received, use Ford altimeter setting and increase all DA 107 feet and all MDA 120 feet, increase S-LOC 1 and Circling Cat C and D visibility $\frac{1}{4}$ mile.



MISSED APPROACH: Climb to 1600, then climbing right turn to 3000 via heading 101° and SAW R-095 to YEXJO Int and hold.

AWOS-3 118.375	MINNEAPOLIS CENTER 119.1 290.2	SAWYER TOWER ★ 119.975 (CTAF) 0	GND CON 121.65	UNICOM 122.7
--------------------------	--	---	--------------------------	------------------------



CATEGORY	A	B	C	D
S-ILS 1		1380-½	200 (200-½)	
S-LOC 1		1520-½	340 (300-½)	1520-¾ 340 (300-¾)
CIRCLING	1720-1	499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)

LOM SO **410** APP CRS **013°** Rwy Idg **12366**
 TDZE **1180**
 Apt Elev **1221**

NDB RWY 1

MARQUETTE/ SAWYER INTL (SAW)

T For inoperative MALSR, increase S-1 CAT C visibility to 1.
A NA When local altimeter setting not received, use Ford altimeter setting and increase all MDA 120 feet, increase S-1 Cat C visibility ¼ mile and Cat D ½ mile.

MALSR



MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 direct SUOMI LOM and hold.

AWOS-3
118.375

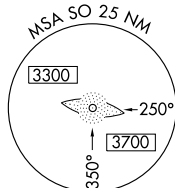
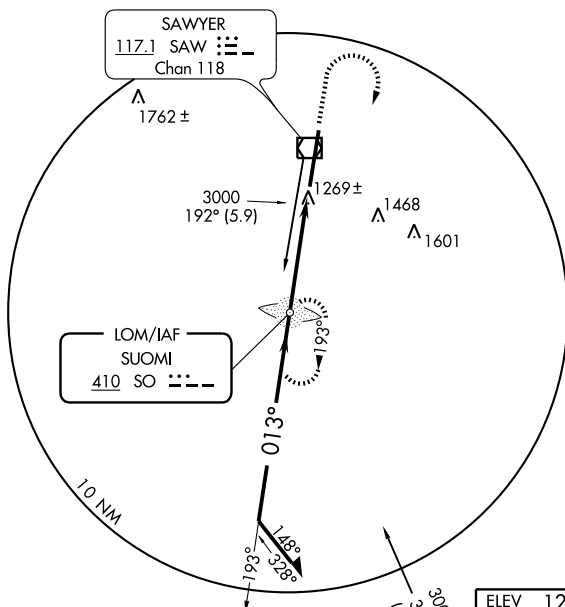
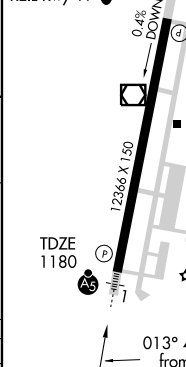
MINNEAPOLIS CENTER
119.1 290.2

SAWYER TOWER ★
119.975 (CTAF) 0

GND CON
121.65

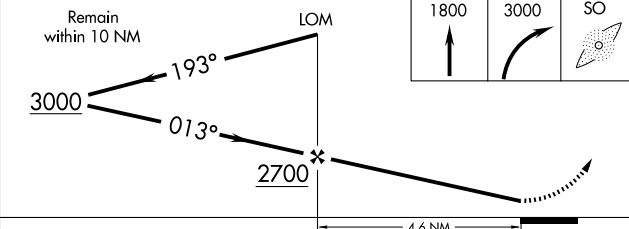
UNICOM
122.7

2049
 ▲

ELEV 1221 **D**HIRL Rwy 1-19 **1**REIL Rwy 19 **1**

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



CATEGORY	A	B	C	D
S-1	1580-¾ 400 (400-¾)			1580-1 400 (400-1)
CIRCLING	1720-1 499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)	

MARQUETTE, MICHIGAN

Orig-A 03JUN10

46°21'N - 87°24'W

MARQUETTE/ SAWYER INTL (SAW)

NDB RWY 1

WAAS CH 86616 W19A	APP CRS 193°	Rwy Idg 12366 TDZE 1221 Apt Elev 1221
--	------------------------	--

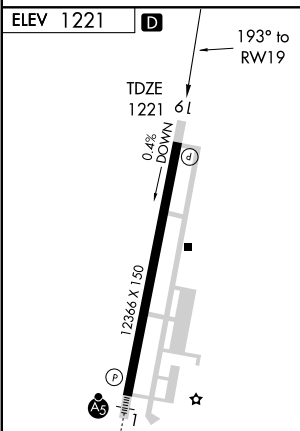
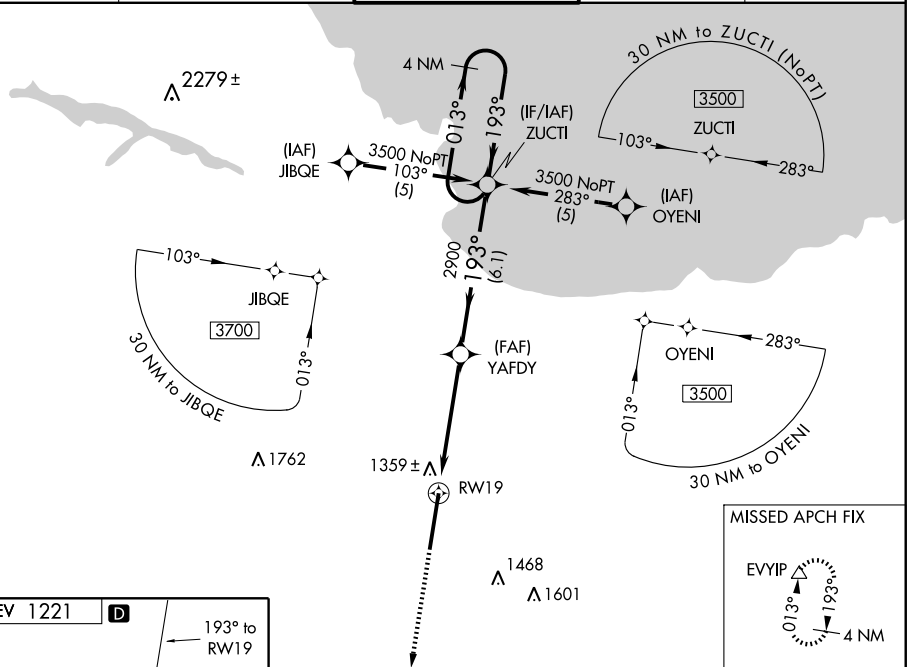
RNAV (GPS) RWY 19

MARQUETTE/SAWYER INTL (SAW)

DME/DME RNP-0.3 NA. Baro-VNAV NA when using Ford altimeter setting.
 For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). VDP NA when using Ford altimeter setting.
 When local altimeter setting not received, use Ford altimeter setting and increase all DA 107 feet and all MDA 120 feet, LPV all Cats visibility ¼ mile, LNAV/VNAV and LNAV Cat C and D visibility ½ mile, and Circling Cat C and D visibility ½ mile.

MISSED APPROACH: Climb to 3500 direct EVYIP and hold.

AWOS-3 118.375	MINNEAPOLIS CENTER 119.1 290.2	SAWYER TOWER ★ 119.975 (CTAF) 0	GND CON 121.65	UNICOM 122.7
--------------------------	--	---	--------------------------	------------------------



ZUCUT I Holding Pattern

* 1.4 NM to RW19

* 3.6 NM

* 6.1 NM

YAFDY

ZUCUT I

013°

193°

3500

GS 3.00°
TCH 60

CATEGORY	A	B	C	D
LPV DA	1421-3/4 200 (200-3/4)			
LNAV/VNAV DA	1665-1 1/2 444 (500-1 1/2)			
LNAV MDA	1720-1 499 (500-1)		1720-1 1/4 499 (500-1 1/4)	1720-1 1/2 499 (500-1 1/2)
CIRCLING	1720-1 499 (500-1)		1720-1 1/2 499 (500-1 1/2)	1780-2 559 (600-2)

MARQUETTE, MICHIGAN

Amdt 1 03JUN10

46°21'N - 87°24'W

MARQUETTE/ SAWYER INTL (SAW)

RNAV (GPS) RWY 19

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

VOR/DME SAW <u>117.1</u> Chan 118	APP CRS 009°	Rwy Idg 12366 TDZE 1180 Apt Elev 1221
---	------------------------	--

VOR RWY 1

MARQUETTE/ SAWYER INTL (SAW)

MALSR

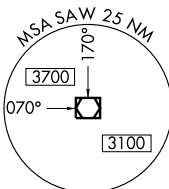
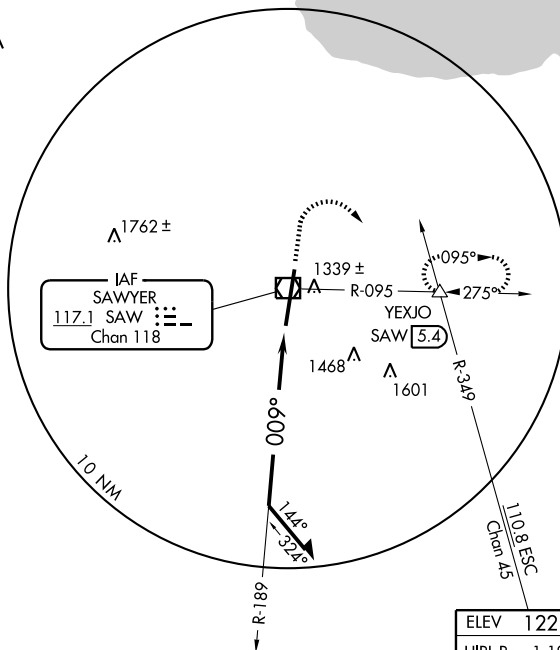
MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 via heading 101° and SAW R-095 to YEXJO Int and hold.

AWOS-3
118.375

MINNEAPOLIS CENTER
119.1 290.2

SAWYER TOWER ★
119.975 (CTAF) L

GND CON
121,65

UNICOM
122.7 $2115 \pm \Delta$ 

Remain
within 10 NM

VOR/DME

3000

○

1800

3000

YEXJO
△

ELEV	1221
------	------

HIRL Rwy 1-19 REIL Rwy 19 **L**

17

4

C

X 175

2366

1

Ⓟ

TDZE

1180 17

4

← (

SA

1

1

MARQUETTE / SAV

1

MARQUETTE, MICHIGAN

Orig 10098

MARQUETTE/ SAWYER INTL (SAW)

VOR RWY 1

46°21'N - 87°24'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

VOR/DME SAW
117.1
 Chan **118**

APP CRS
202°

Rwy ldg
 TDZE **12366**
 Apt Elev **1221**

VOR RWY 19

MARQUETTE/ SAWYER INTL (SAW)



MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 050° and SAW R-095 to YEXJO Int and hold.

AWOS-3
118.375

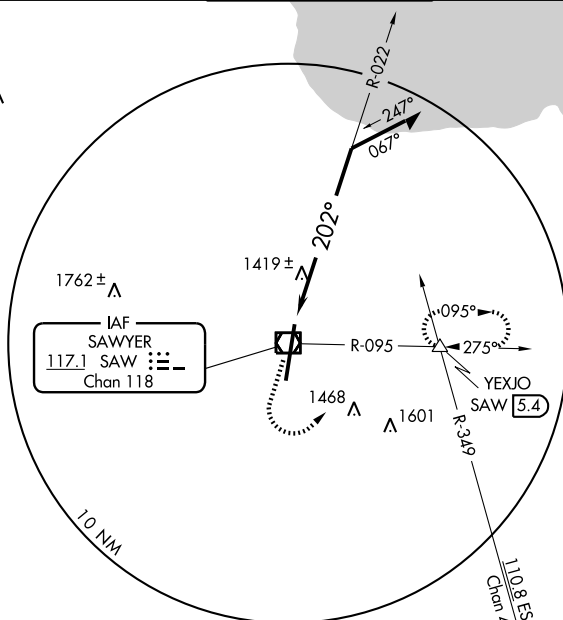
MINNEAPOLIS CENTER
119.1 290.2

SAWYER TOWER ★
119.975 (CTAF) 0

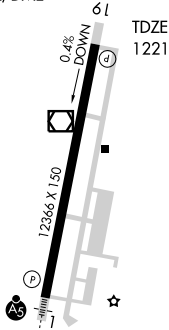
GND CON
121.65

UNICOM
122.7

2115± Δ

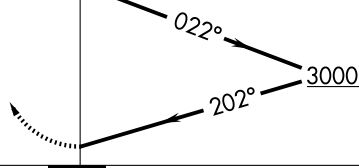


ELEV 1221 **D**
 202° to
 SAW VOR/DME



1800
 3000
 HDG 050°
 SAW R-095
 117.1
 YEXJO
 Δ

VOR/DME
 Remain
 within 10 NM



CATEGORY	A	B	C	D
S-19	1720-1	499 (500-1)	1720-1¼ 499 (500-1¼)	1720-1½ 499 (500-1½)
CIRCLING	1720-1	499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)

HIRL Rwy 1-19 **0**
 REIL Rwy 19 **0**

MARQUETTE, MICHIGAN
 Orig 10098

46°21'N - 87°24'W

MARQUETTE/ SAWYER INTL (SAW)

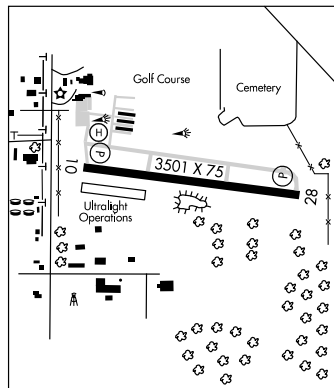
VOR RWY 19

MARSHALL**BROOKS FLD** (RMY) 1 S UTC-5(-4DT) N42°15.07' W84°57.33'**DETROIT**

941 B FUEL 100LL, TPA-1941(1000) NOTAM FILE RMY

L-28J**RWY 10-28:** H3501X75 (ASPH) S-20 MIRL**IAP****RWY 10:** PAPI (P4L)—GA 4.0° TCH 25'. Tree.**RWY 28:** PAPI (P4R)—GA 4.0° TCH 36'. Trees.**AIRPORT REMARKS:** Attended 1300Z†—dusk except major holidays.

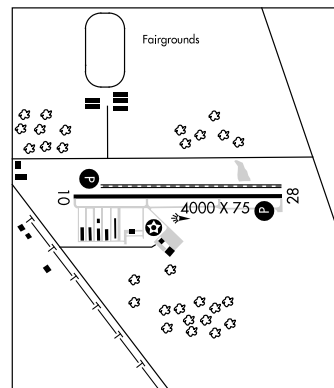
Parachute activity on and in/ovf arpt. Snow removal in progress 15 Nov-15 Apr. Vehicle operators monitor CTAF. Noise abatement procedures in effect ctc arpt manager 269-781-5183 extension 1150. CAUTION: Deer on and in/ovf arpt. Extensive glider and ultralight activity on and in/ovf arpt. Ultralight acft ops south of Rwy 10-28. Ultralight acft fly left hand pattern 500' AGL, S of Rwy 10-28. MIRL Rwy 10-28 and H1 perimeter lgts preset low ints, to increase ints ACTIVATE—CTAF.

WEATHER DATA SOURCES: AWOS-3 120.025 (269) 781-9070.**COMMUNICATIONS:** CTAF/UNICOM 122.8**BATTLE CREEK RCD 122.2 (LANSING RADIO)****(R) KALAMAZOO APP/DEP CON 119.2 (1100-0400Z†)****(R) CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)****RADIO AIDS TO NAVIGATION:** NOTAM FILE BTL.**BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59'****W85°15.14' 107°13.7 NM to fld. 922/2W.****HELIPAD H1:** H50X50 (CONC) S-12.5 PERIMETER LGTS**HELIPAD H1:** Pole.**HELIPORT REMARKS:** 150' lgtd water twr 3000' south of pad. 21' lgtd pole 195' northeast of pad. No snow removal.**MASON JEWETT FLD** (TEW) 1 SE UTC-5(-4DT) N42°33.95' W84°25.39'**DETROIT**

920 B FUEL 100LL, JET A NOTAM FILE TEW

L-28J**RWY 10-28:** H4000X75 (ASPH) S-12.5 MIRL**IAP****RWY 10:** REIL. PAPI(P4L)—GA 4.0° TCH 35'. Antenna. Rgt tfc.**RWY 28:** REIL. PAPI(P4L)—GA 3.0° TCH 25'. Road.

AIRPORT REMARKS: Unattended. Powered parachutes prohibited. Deer and birds on and in/ovf arpt. Hangar space as avbl; confirm by prior arrangement. MIRL Rwy 10-28; PAPI and REIL Rwy 10 and 28 and rotating bcen ops SS-0500Z†, after 0500Z† ACTIVATE—CTAF. Rwy 28 PAPI unusable byd 7° right and left of centerline.

WEATHER DATA SOURCES: AWOS-3 119.425 (517) 676-5607.**COMMUNICATIONS:** CTAF/UNICOM 122.7**(R) LANSING APP/DEP CON 118.65****RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.**LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'****W84°41.85' 132°15.2 NM to fld. 887/5W.****MASON CO** (See LUDINGTON)**MBS INTL** (See SAGINAW)**MECOSTA MORTON** (27C) 2 W UTC-5(-4DT) N43°37.75' W85°15.75'**CHICAGO**

1022 NOTAM FILE LAN

RWY 09-27: 2027X100 (TURF)**RWY 09:** Thld dsplcd 546'. Road.**RWY 27:** Brush.**RWY 03-21:** 2010X100 (TURF)**RWY 03:** Thld dsplcd 760'. Trees.**RWY 21:** Thld dsplcd 460'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED when rwy are snow covered or with standing water. No winter snow removal. Model aircraft area east of Rwy 03-21 intersection. Rwy 03-21 and dsplcd thld marked with 18 inch yellow cones. Rwy 09-27 and dsplcd thld marked with 18 inch yellow cones.

COMMUNICATIONS: CTAF 122.9

VOR BTL 109.4 Chan 31	APP CRS 287°	Rwy Idg TDZE Apt Elev	3501 940 941
---	------------------------	-----------------------------	---

VOR or GPS RWY 28

MARSHALL / BROOKS FIELD (RMY)

MISSED APPROACH: Climbing left turn to 2700 via
BTL R-107 to ALBIO Int/BTL 19 DME and hold.

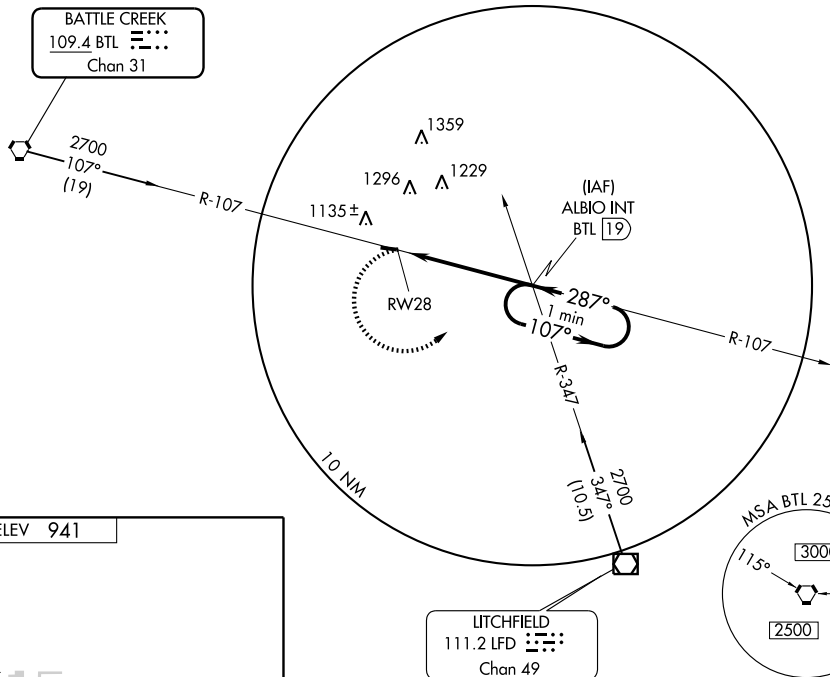
AWOS-3
120.025

KALAMAZOO APP CON
119.2 340.9

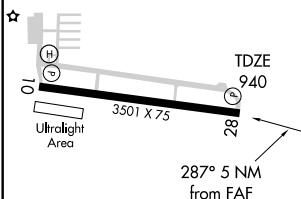
UNICOM
122.8 (CTAF)

1956
1956

EC-1, 26 AUG 2010 to 23 SEP 2010



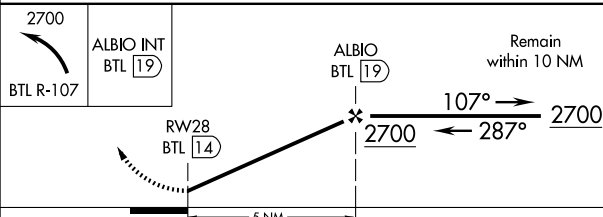
ELEV 941



MIRL Rwy 10-28

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-28	1400-1	460 (500-1)	1400-1¼ 460 (500-1¼)	NA
CIRCLING	1460-1	519 (600-1)	1460-1½ 519 (600-1½)	NA

MARSHALL**BROOKS FLD** (RMY) 1 S UTC-5(-4DT) N42°15.07' W84°57.33'

941 B FUEL 100LL, TPA-1941(1000) NOTAM FILE RMY

RWY 10-28: H3501X75 (ASPH) S-20 MIRL

RWY 10: PAPI (P4L)—GA 4.0° TCH 25'. Tree.

RWY 28: PAPI (P4R)—GA 4.0° TCH 36'. Trees.

AIRPORT REMARKS: Attended 1300Z†—dusk except major holidays.

Parachute activity on and in/ovf arpt. Snow removal in progress 15 Nov-15 Apr. Vehicle operators monitor CTAF. Noise abatement procedures in effect ctc arpt manager 269-781-5183 extension 1150. CAUTION: Deer on and in/ovf arpt. Extensive glider and ultralight activity on and in/ovf arpt. Ultralight acft ops south of Rwy 10-28. Ultralight acft fly left hand pattern 500' AGL, S of Rwy 10-28. MIRL Rwy 10-28 and H1 perimeter lgts preset low ints, to increase ints ACTIVATE—CTAF.

WEATHER DATA SOURCES: AWOS-3 120.025 (269) 781-9070.**COMMUNICATIONS:** CTAF/UNICOM 122.8

BATTLE CREEK RCD 122.2 (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 119.2 (1100-0400Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

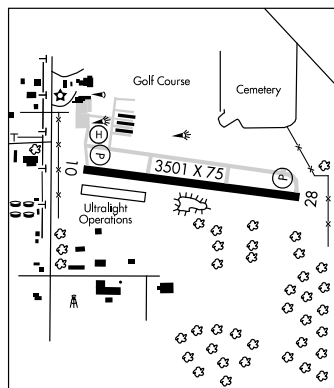
RADIO AIDS TO NAVIGATION: NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59'

W85°15.14' 107°13.7 NM to fld. 922/2W.

HELIPAD H1: H50X50 (CONC) S-12.5 PERIMETER LGTS

HELIPAD H1: Pole.

HELIPORT REMARKS: 150' lgtd water twr 3000' south of pad. 21' lgtd pole 195' northeast of pad. No snow removal.**MASON JEWETT FLD** (TEW) 1 SE UTC-5(-4DT) N42°33.95' W84°25.39'

920 B FUEL 100LL, JET A NOTAM FILE TEW

RWY 10-28: H4000X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Antenna. Rgt tfc.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Road.

AIRPORT REMARKS: Unattended. Powered parachutes prohibited. Deer and birds on and in/ovf arpt. Hangar space as avbl; confirm by prior arrangement. MIRL Rwy 10-28; PAPI and REIL Rwy 10 and 28 and rotating bcn ops SS-0500Z†, after 0500Z†

ACTIVATE—CTAF. Rwy 28 PAPI unusable byd 7° right and left of centerline.

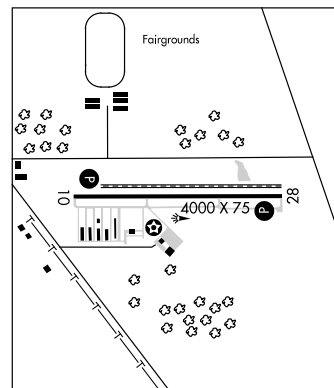
WEATHER DATA SOURCES: AWOS-3 119.425 (517) 676-5607.**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 132°15.2 NM to fld. 887/5W.

**MASON CO** (See LUDINGTON)**MBS INTL** (See SAGINAW)**MECOSTA MORTON** (27C) 2 W UTC-5(-4DT) N43°37.75' W85°15.75'

1022 NOTAM FILE LAN

RWY 09-27: 2027X100 (TURF)

RWY 09: Thld dspld 546'. Road.

RWY 27: Brush.

RWY 03-21: 2010X100 (TURF)

RWY 03: Thld dspld 760'. Trees.

RWY 21: Thld dspld 460'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED when rwy are snow covered or with standing water. No winter snow removal. Model aircraft area east of Rwy 03-21 intersection. Rwy 03-21 and dspld thld marked with 18 inch yellow cones. Rwy 09-27 and dspld thld marked with 18 inch yellow cones.

COMMUNICATIONS: CTAF 122.9**DETROIT**

L-28J

IAP

DETROIT

L-28J

IAP

CHICAGO

APP CRS 275°	Rwy Idg TDZE Apt Elev	4000 919 919
------------------------	-----------------------------	---

GPS RWY 28

MASON JEWETT FIELD (TEW)

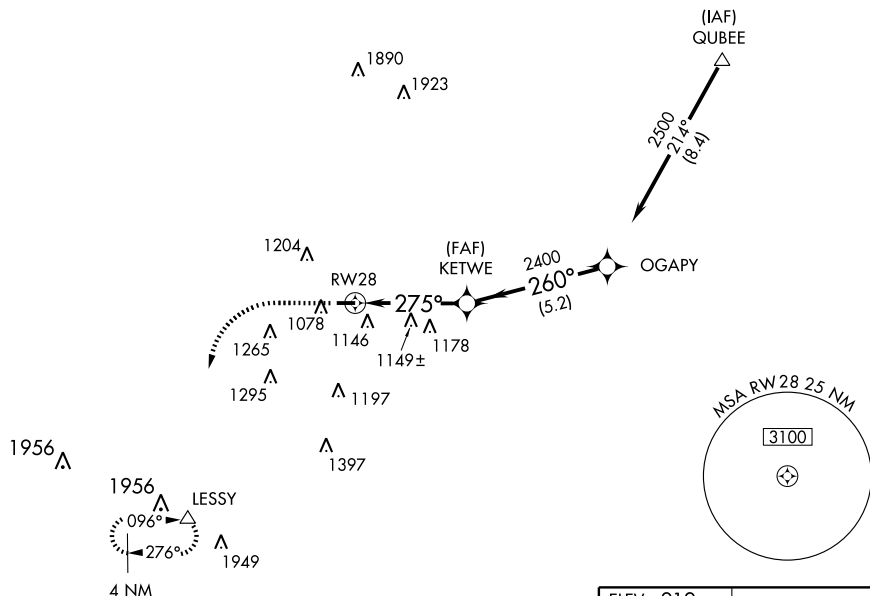


MISSED APPROACH: Climb to 1700 then climbing left turn to 3000 direct LESSY and hold.

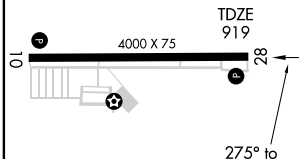
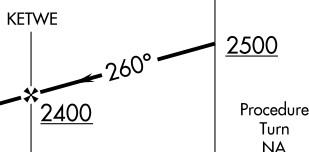
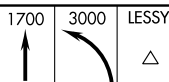
AWOS-3
119.425

LANSING APP CON
118.65 226.40

UNICOM
122.7 (CTAF) 0



ELEV 919



CATEGORY	A	B	C	D
S-28	1400-1	481 (500-1)	NA	
CIRCLING	1560-1	641 (700-1)	NA	

MIRL Rwy 10-28 0
REIL Rwy 10 and 28 0

VORTAC LAN 110.8 Chan 45	APP CRS 132°	Rwy Idg TDZE Apt Elev	N/A N/A 919
--	------------------------	-----------------------------	--

VOR or GPS-A
MASON JEWETT FIELD (TEW)



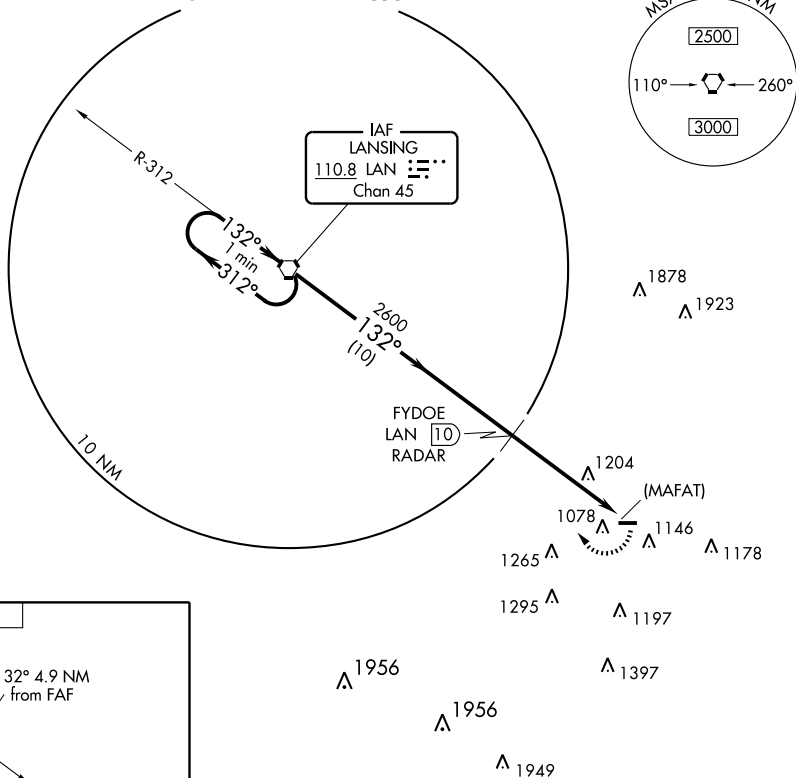
MISSED APPROACH: Climbing right turn to 2600
via LAN R-132 to LAN VORTAC and hold.

AWOS-3
119.425

LANSING APP CON
118.65 226.40

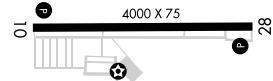
UNICOM
122.7 (CTAF) **0**

DME or RADAR REQUIRED



ELEV 919

132° 4.9 NM
from FAF

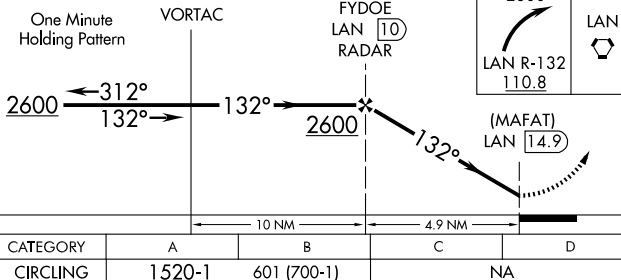


MIRL Rwy 10-28 **0**
REIL Rwy 10 and 28 **0**

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

One Minute
Holding Pattern



MENOMINEE-MARINETTE TWIN CO (MNM) 1 NW UTC-6(-5DT)

N45°07.60' W87°38.31'

625 B S2 FUEL 100LL, JET A NOTAM FILE MNM

RWY 03-21: H6000X100(ASPH) S-80, D-100, 2S-127,
2D-175 HIRL

RWY 03: MALSR. RWY 21: PAPI(P4L)—GA 3.0° TCH 43'.

RWY 14-32: H5100X100 (ASPH-PFC) S-30, D-35,
DT-60 MIRL 0.3% up NW

RWY 14: VASI(V4L)—GA 3.0° TCH 41'. Trees.

RWY 32: PAPI(P4L)—GA 3.0° TCH 39'. Tree.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z, Sat
1400-1800Z, for attendant after hrs call 715-938-2006 or
906-282-0260. 24 hr self-serve 100LL with major credit card.
Deer and gulls on and invof arpt. Avoid over flight of noise
sensitive area lctd 7 miles S of arpt. 48 hr PPR for unscheduled
air carrier ops with more than 30 passenger seats call
906-863-8408. ACTIVATE HIRL Rwy 03-21, MIRL Rwy 14-32;
VASI Rwy 14, PAPI Rwy 21 and Rwy 32; MALSR Rwy 03—CTAF.

WEATHER DATA SOURCES: AWOS-3 109.6 MNM (906) 863-8801.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 109.6T (GREEN BAY RADIO)

GREEN BAY APP/DEP CON 119.5 (1130-0530Z)

⑤ MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE MNM.

(L) VOR/DME 109.6 MNM Chan 33 N45°10.81' W87°38.83' 173° 3.2 NM to fld. 650/00E. AWOS-3.

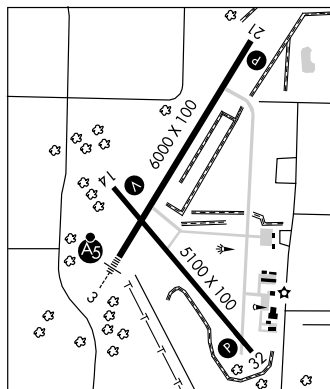
TRIBE NDB (LOM) 239 TN N45°03.70' W87°41.76' 035° 4.6 NW to fld.

ILS 108.7 I-TNQ Rwy 03. Class IB. LOM TRIBE NDB. ILS unmonitored.

GREEN BAY

H-2J, L-31B

IAP

**MERRILLAT** (See TECUMSEH)**MEYERS-DIVER'S** (See TECUMSEH)**MIDLAND****JACK BARSTOW** (IKW) 3 NW UTC-5(-4DT) N43°39.78' W84°15.68'

635 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 06-24: H3801X75 (ASPH) S-24 MIRL 0.4% up NE

RWY 06: REIL. PAPI(P2L). Road.

RWY 24: REIL. PAPI(P2L). Trees.

RWY 18-36: H3001X75 (ASPH) S-24 MIRL

RWY 18: REIL. PAPI(P2L). Trees.

RWY 36: REIL. PAPI(P2L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z, Sat-Sun
1300-2100Z. Arpt unattended major holidays. Deer on and invof
arpt. Occasional ultralight activity. Noise sensitive area S of arpt;
use preferred Rwy 06-24. MIRL Rwy 06-24 and Rwy 18-36 present
on low ints dusk-0400Z. After 0400Z ACTIVATE—CTAF. To
increase ints and ACTIVATE PAPI and REIL Rwy 06, 24, 18 and
36—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.525 (989) 835-5841.**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑤ SAGINAW APP/DEP CON 126.45 (1100-0400Z)

⑤ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

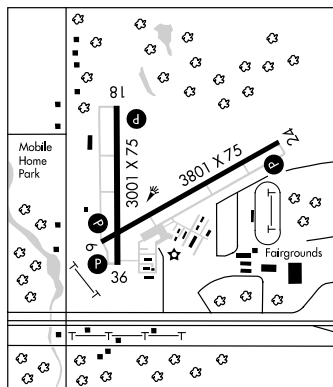
W84°04.64' 318° 11.2 NM to fld. 663/3W. HIWAS.

COMM/NAV/WEATHER REMARKS: GCO OTS indef.

DETROIT

L-28J, 31C

IAP



LOC I-TNQ 108.7	APP CRS 034°	Rwy Idg 6000 TDZE 624 Apt Elev 625
---------------------------	------------------------	---

ILS or LOC RWY 3

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

NA When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all DA/MDA 60 feet, increase S-LOC 3 Cat C/D and Circling Cat C visibility ¼ mile. For inoperative MALS when using Sturgeon Bay altimeter setting, increase S-ILS 3 all Cats visibility to 1 mile.

MALS



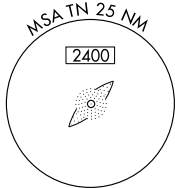
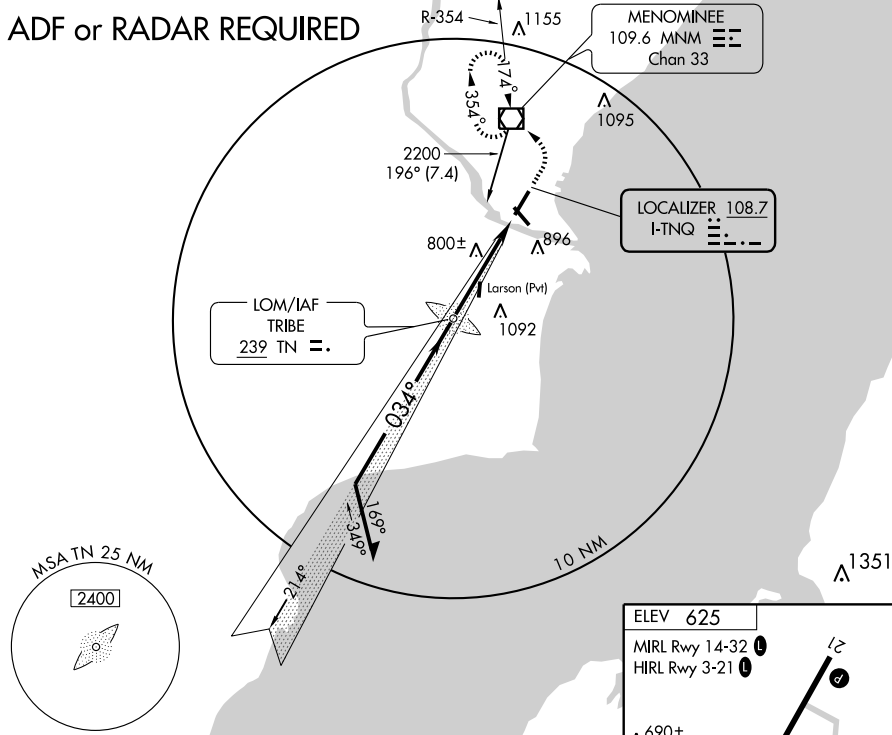
MISSED APPROACH: Climb to 1100, then climbing left turn to 2200 direct MNM VOR/DME and hold.

AWOS-3
109.6

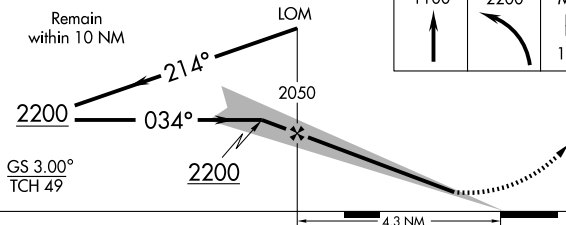
GREEN BAY APP CON ★
119.5 338.2

UNICOM
122.8 (CTAF)

ADF or RADAR REQUIRED



Remain
within 10 NM



CATEGORY	A	B	C	D
S-ILS 3	824-½ 200 (200-½)			
S-LOC 3	1100-½ 476 (500-½)	1100-¾ 476 (500-¾)		1100-1 476 (500-1)
CIRCLING	1200-1 575 (600-1)	1200-1½ 575 (600-1½)	1200-2 575 (600-2)	1200-2 575 (600-2)

ELEV 625

MIRL Rwy 14-32

HIRL Rwy 3-21

690±

TDZE

624

677±

034° 4.3 NM
from FAF

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

MENOMINEE, MICHIGAN

Amdt 2B 10042

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

45°08'N - 87°38'W

ILS or LOC RWY 3

NDB RWY 3

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

LOM TN 239	APP CRS 034°	Rwy Idg TDZE Apt Elev	6000 624 625
----------------------	------------------------	-----------------------------	---

NA When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase S-3 Cat C/D and Circling Cat C visibility ¼ mile.

MALSR



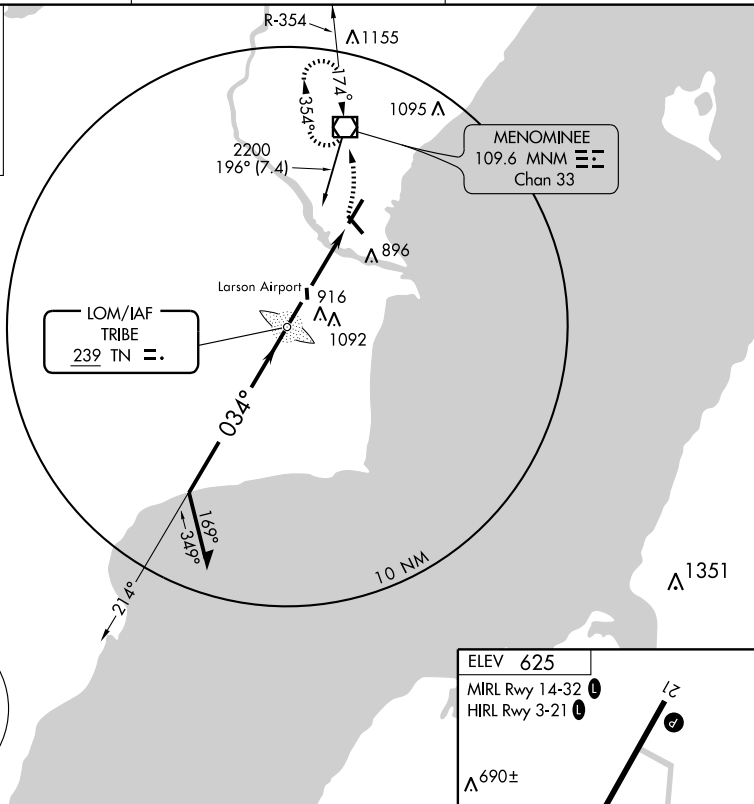
MISSED APPROACH: Climbing left turn to 2200 direct MNM VOR/DME and hold.

AWOS-3
109.6

GREEN BAY APP CON★
119.5 338.2

UNICOM
122.8 (CTAF) 0

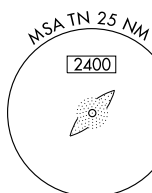
ALTERNATE
MISSED APCH FIX
TRIBE
239 TN =



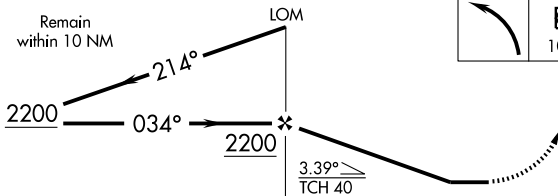
LOM/IAF
TRIBE
239 TN =

Larson Airport

MENOMINEE
109.6 MNM
Chan 33



Remain
within 10 NM



2200 MNM
109.6

ELEV 625

MIRL Rwy 14-32
HIRL Rwy 3-21

Λ 690±

TDZE 624

Λ 677±
034° 4.3 NM
from FAF


FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

Rwy Idg	6000
TDZE	624
Apt Elev	625

RNAV (GPS) RWY 3

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

	<p>For inoperative MALS, increase LNAV Cat D visibility to 1¼. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all DA/MDA 60 feet, increase LNAV Cat C and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Sturgeon Bay altimeter setting. For inoperative MALS when using Sturgeon Bay altimeter setting, increase LPV all Cats visibility to 1 mile.</p>
---	--

MALS R

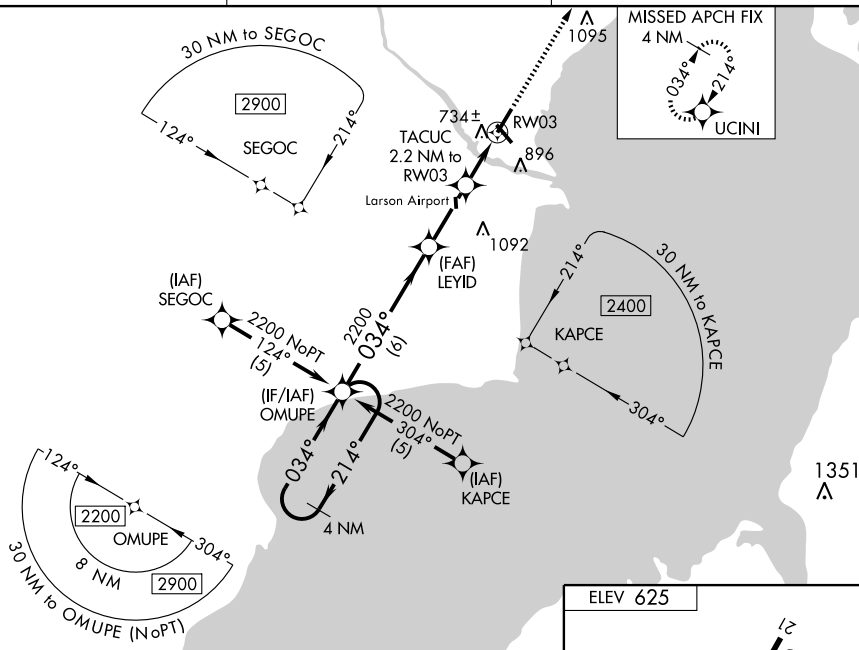


MISSED APPROACH:
Climb to 2300 direct
UCINI and hold.

AWOS-3
109.6

GREEN BAY APP CON ★
119.5 338.2

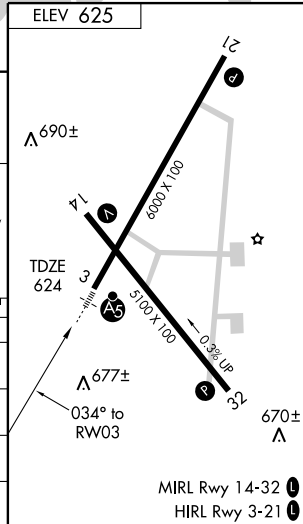
UNICOM
122.8 (CTAF) **L**



4 NM
Holding Pattern

[illegible]

CATEGORY	A	B	C	D
LPV DA	824-1½ 200 (200-½)			
LNAV/ VNAV DA	1150-1½ 526 (600-1½)			
LNAV MDA	1000-½ 376 (400-½)			1000-1 376 (400-1)
CIRCLING	1200-1 575 (600-1)		1200-1½ 575 (600-1½)	1200-2 575 (600-2)



MENOMINEE, MICHIGAN
Orig 10042

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

RNAV (GPS) RWY 3

45°08'N - 87°38'W

MIRL Rwy 14-32 **L**
HIRL Rwy 3-21 **L**

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

APP CRS 214°	Rwy Idg 6000
	TDZE 625
	Apt Elev 625

RNAV (GPS) RWY 21

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

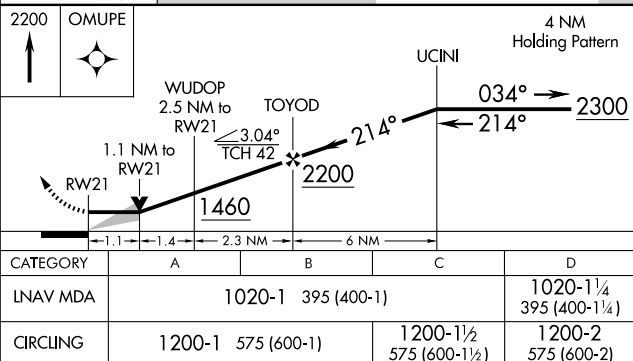
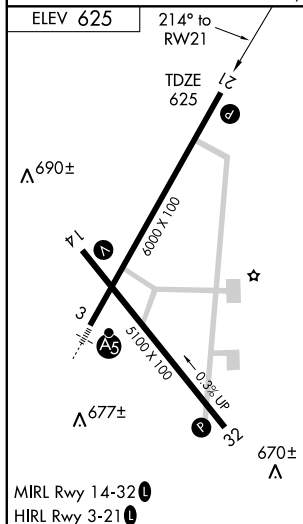
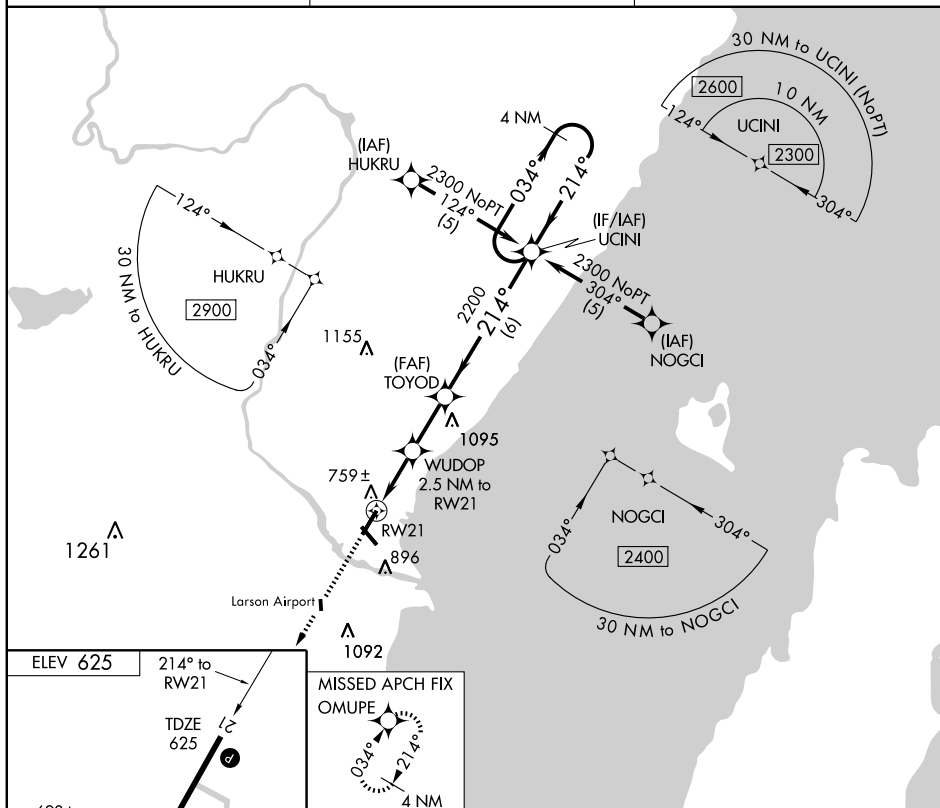
⚠ DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile. VDP NA when using Sturgeon Bay altimeter setting.

MISSED APPROACH: Climb to 2200 direct OMUPE and hold.

AWOS-3
109.6

GREEN BAY APP CON ★
119.5 338.2

UNICOM
122.8 (CTAF) ①



APP CRS
323°

Rwy Idg **5100**
TDZE **608**
Apt Elev **625**

RNAV (GPS) RWY 32

MENOMINEE-MARINETTE TWIN COUNTY (MINM)



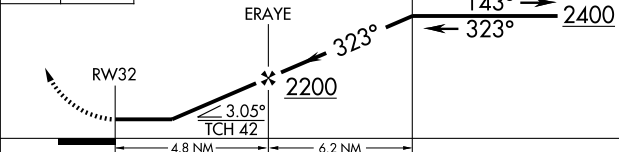
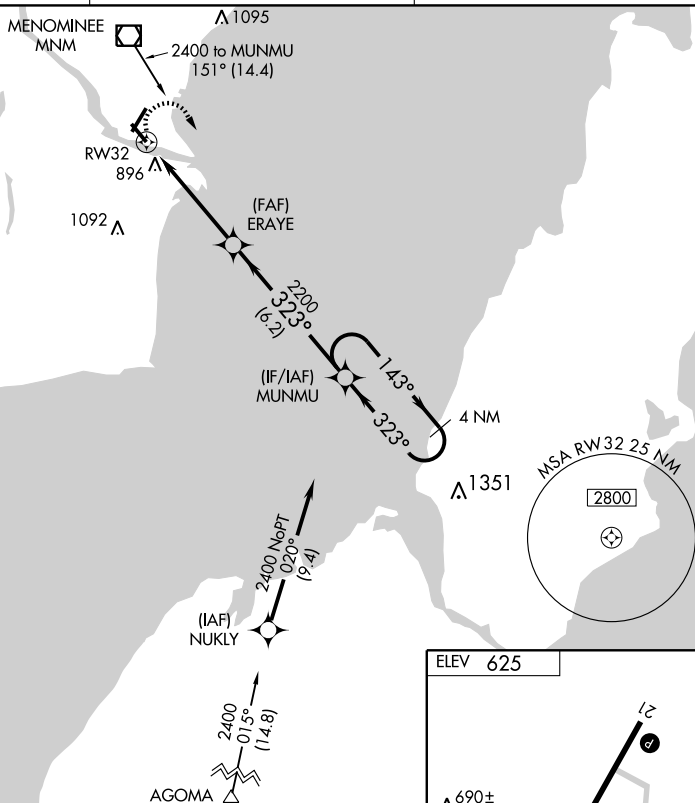
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 2400 direct MUNMU WP and hold.

AWOS-3
109.6

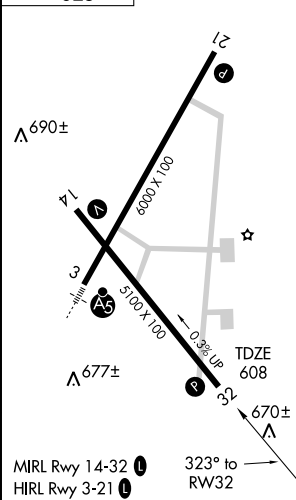
GREEN BAY APP CON ★
119.5 338.2

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
LNAV MDA	1160-1 552 (600-1)		1160-1½ 552 (600-1½)	1160-1¾ 552 (600-1¾)
CIRCLING	1200-1 575 (600-1)		1200-1½ 575 (600-1½)	1200-2 575 (600-2)

ELEV 625



VOR/DME MNM
Chan **33**

APP CRS
174°

Rwy Idg
TDZE
Apt Elev

N/A
N/A
625

VOR-A
MENOMINEE-MARINETTE TWIN COUNTY (MNM)

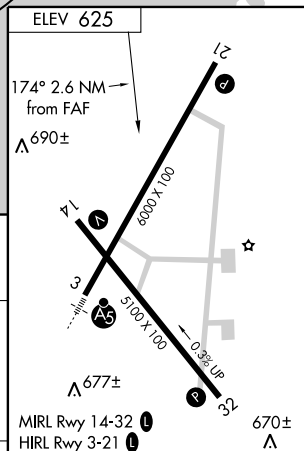
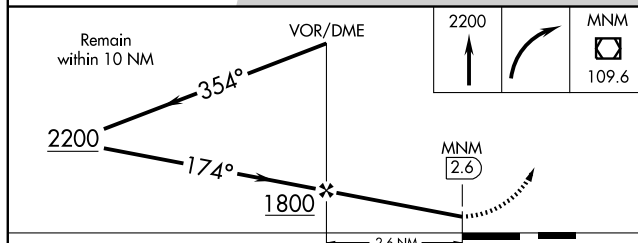
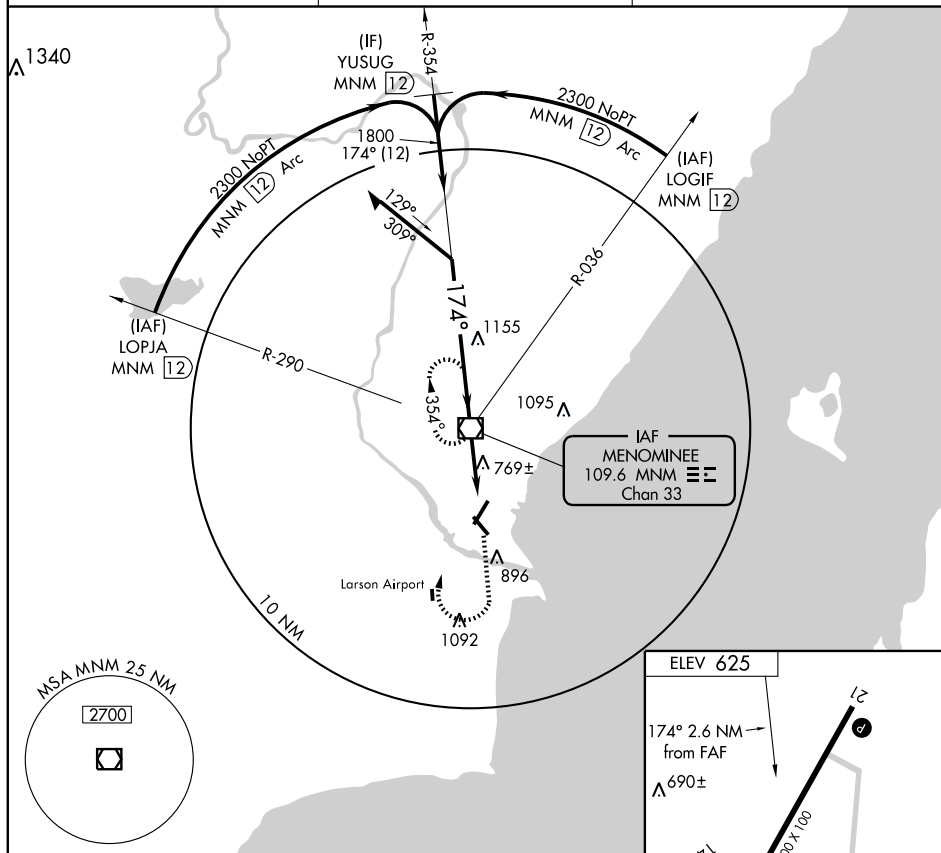
▼ When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase MDA 60 feet, increase Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2200 then right turn direct MNM VOR/DME and hold.

AWOS-3
109.6

GREEN BAY APP CON★
119.5 338.2

UNICOM
122.8 (CTAF) 0



CATEGORY	A	B	C	D
CIRCLING	1200-1	575 (600-1)	1200-1½ 575 (600-1½)	1200-2 575 (600-2)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

MENOMINEE-MARINETTE TWIN CO (MNM) 1 NW UTC-6(-5DT)

N45°07.60' W87°38.31'

625 B S2 FUEL 100LL, JET A NOTAM FILE MNM

RWY 03-21: H6000X100(ASPH) S-80, D-100, 2S-127,
2D-175 HIRL

RWY 03: MALSR. RWY 21: PAPI(P4L)—GA 3.0° TCH 43'.

RWY 14-32: H5100X100 (ASPH-PFC) S-30, D-35,
DT-60 MIRL 0.3% up NW

RWY 14: VASI(V4L)—GA 3.0° TCH 41'. Trees.

RWY 32: PAPI(P4L)—GA 3.0° TCH 39'. Tree.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z, Sat
1400-1800Z, for attendant after hrs call 715-938-2006 or
906-282-0260. 24 hr self-serve 100LL with major credit card.
Deer and gulls on and invof arpt. Avoid over flight of noise
sensitive area lctd 7 miles S of arpt. 48 hr PPR for unscheduled
air carrier ops with more than 30 passenger seats call
906-863-8408. ACTIVATE HIRL Rwy 03-21, MIRL Rwy 14-32;
VASI Rwy 14, PAPI Rwy 21 and Rwy 32; MALSR Rwy 03—CTAF.

WEATHER DATA SOURCES: AWOS-3 109.6 MNM (906) 863-8801.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 109.6T (GREEN BAY RADIO)

GREEN BAY APP/DEP CON 119.5 (1130-0530Z)

⑤ MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE MNM.

(L) VOR/DME 109.6 MNM Chan 33 N45°10.81' W87°38.83' 173° 3.2 NM to fld. 650/00E. AWOS-3.

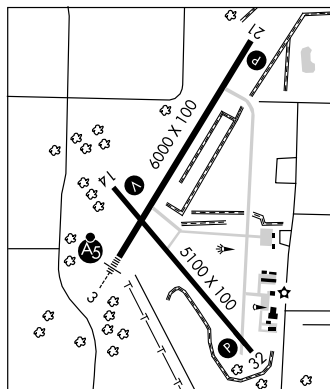
TRIBE NDB (LOM) 239 TN N45°03.70' W87°41.76' 035° 4.6 NW to fld.

ILS 108.7 I-TNQ Rwy 03. Class IB. LOM TRIBE NDB. ILS unmonitored.

GREEN BAY

H-2J, L-31B

IAP

**MERRILLAT** (See TECUMSEH)**MEYERS-DIVER'S** (See TECUMSEH)**MIDLAND****JACK BARSTOW** (IKW) 3 NW UTC-5(-4DT) N43°39.78' W84°15.68'

635 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 06-24: H3801X75 (ASPH) S-24 MIRL 0.4% up NE

RWY 06: REIL. PAPI(P2L). Road.

RWY 24: REIL. PAPI(P2L). Trees.

RWY 18-36: H3001X75 (ASPH) S-24 MIRL

RWY 18: REIL. PAPI(P2L). Trees.

RWY 36: REIL. PAPI(P2L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z, Sat-Sun
1300-2100Z. Arpt unattended major holidays. Deer on and invof
arpt. Occasional ultralight activity. Noise sensitive area S of arpt;
use preferred Rwy 06-24. MIRL Rwy 06-24 and Rwy 18-36 present
on low ints dusk-0400Z. After 0400Z ACTIVATE—CTAF. To
increase ints and ACTIVATE PAPI and REIL Rwy 06, 24, 18 and
36—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.525 (989) 835-5841.**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑤ SAGINAW APP/DEP CON 126.45 (1100-0400Z)

⑤ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

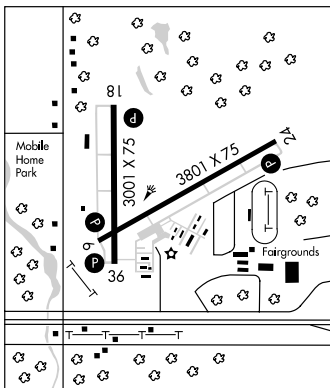
W84°04.64' 318° 11.2 NM to fld. 663/3W. HIWAS.

COMM/NAV/WEATHER REMARKS: GCO OTS indef.

DETROIT

L-28J, 31C

IAP



APP CRS **066°**
Rwy ldg **3801**
TDZE **628**
Apt Elev **635**

RNAV (GPS) RWY 6
MIDLAND / JACK BARSTOW (IKW)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDA 40 feet and LNAV Cat C visibility ¼ mile.

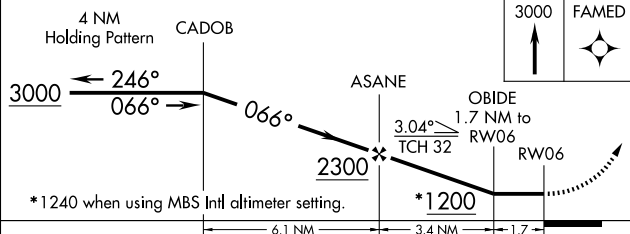
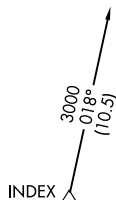
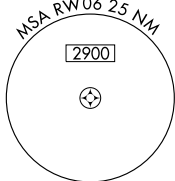
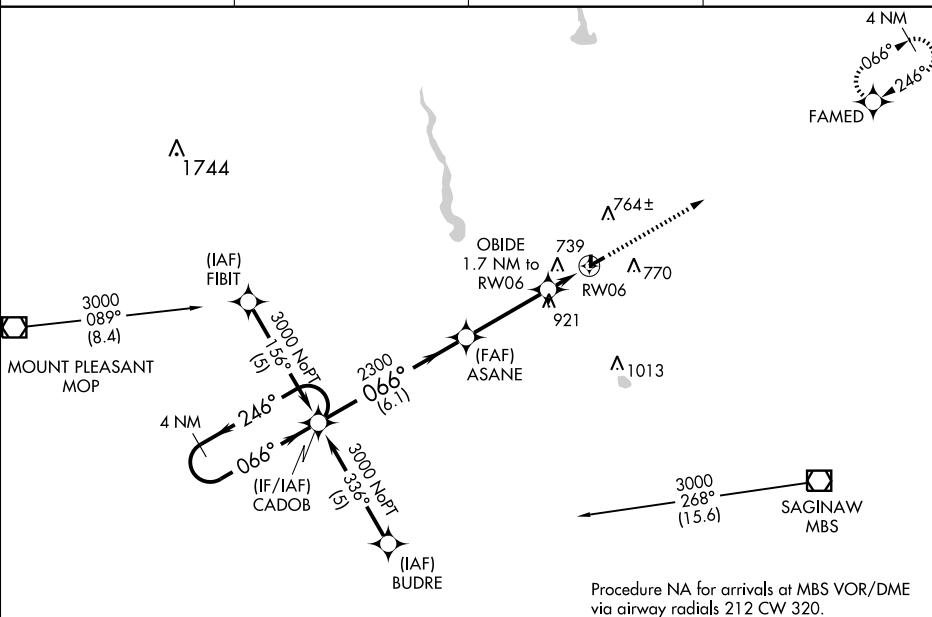
MISSED APPROACH: Climb to 3000 direct FAMED and hold.

AWOS-3
119.525

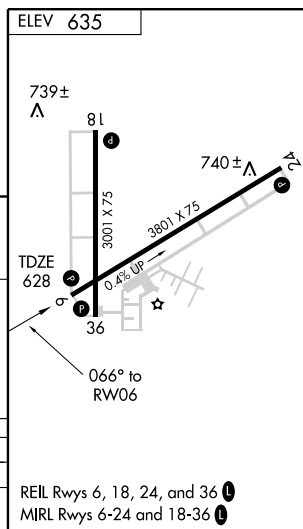
SAGINAW APP CON ★
126.45 235.625

GCO
121.725

UNICOM
122.8 (CTAF)



CATEGORY	A	B	C	D
LNAV MDA	1000-1	372 (400-1)		NA
CIRCLING	1120-1	485 (500-1)	1120-1½ 485 (500-1½)	NA



WAAS CH 72912 W24A	APP CRS 246°	Rwy Idg TDZE Apt Elev 635	3801 635 635
--	------------------------	---	---

RNAV (GPS) RWY 24

MIDLAND / JACK BARSTOW (IKW)

▼ Baro-VNAV NA when using MBS Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
 ▲ Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Intl altimeter setting and increase all DA 31 feet and all MDA 40 feet and all LPV visibility ¼ mile.

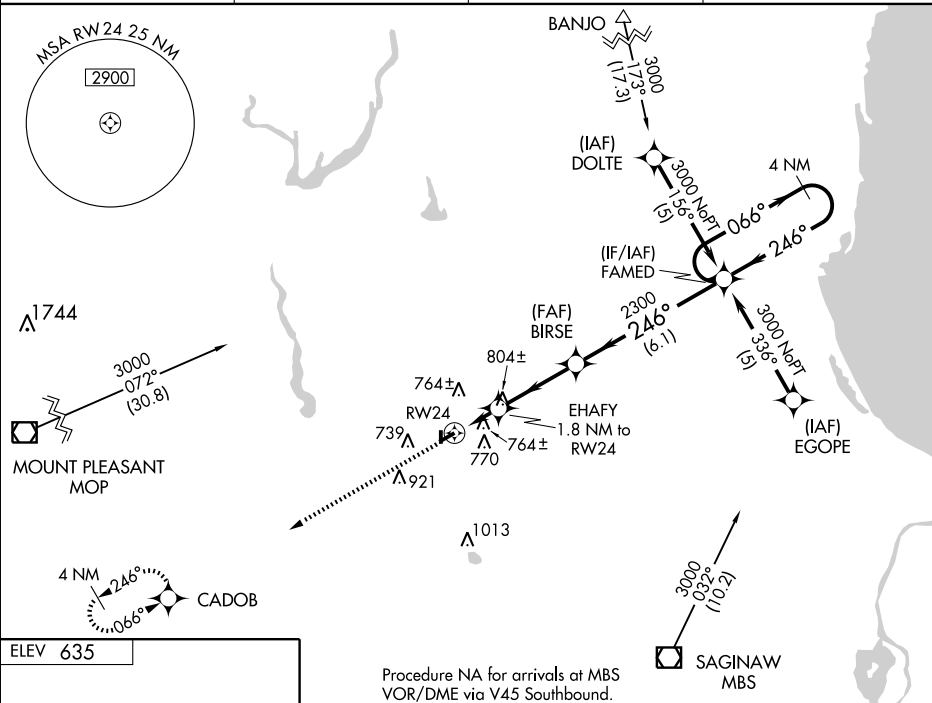
MISSED APPROACH:
Climb to 3000 direct CADOB and hold.

AWOS-3
119.525

SAGINAW APP CON ★
126.45 235.625

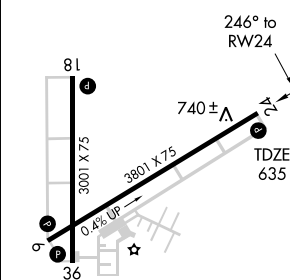
GCO
121.725

UNICOM
122.8 (CTAF)



ELEV 635

Procedure NA for arrivals at MBS
VOR/DME via V45 Southbound.



REIL Rwy 6, 18, 24 and 36
MIRL Rwy 6-24 and 18-36

Procedure NA for arrivals at MBS VOR/DME via V45 Southbound.				
	3000 ↑ CADOB	VGSI and RNAV glidepath not coincident.	FAMED	4 NM Holding Pattern
	*LNAV only.	EHAFF 1.8 NM to RWY24	BIRSE	066° → 3000 ← 246°
	RWY24	*1260	2300	GS 3.00° TCH 53
	1.8	3.2 NM	6.1 NM	
CATEGORY	A	B	C	D
LPV DA	1021-1¼	386 (400-1¼)		NA
LNAV/VNAV DA	1068-1½	433 (500-1½)		NA
LNAV MDA	1060-1	425 (500-1)	1060-1¼ 425 (500-1¼)	NA
CIRCLING	1120-1	485 (500-1)	1120-1½ 485 (500-1½)	NA

VOR/DME MBS 112.9 Chan 76	APP CRS 137°	Rwy Idg TDZE Apt Elev N/A N/A 635
---	------------------------	---

VOR-A

MIDLAND/ JACK BARSTOW (IKW)



When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDA 40 feet.

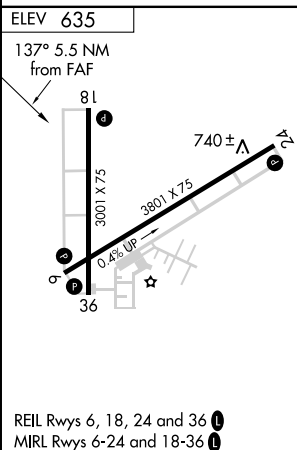
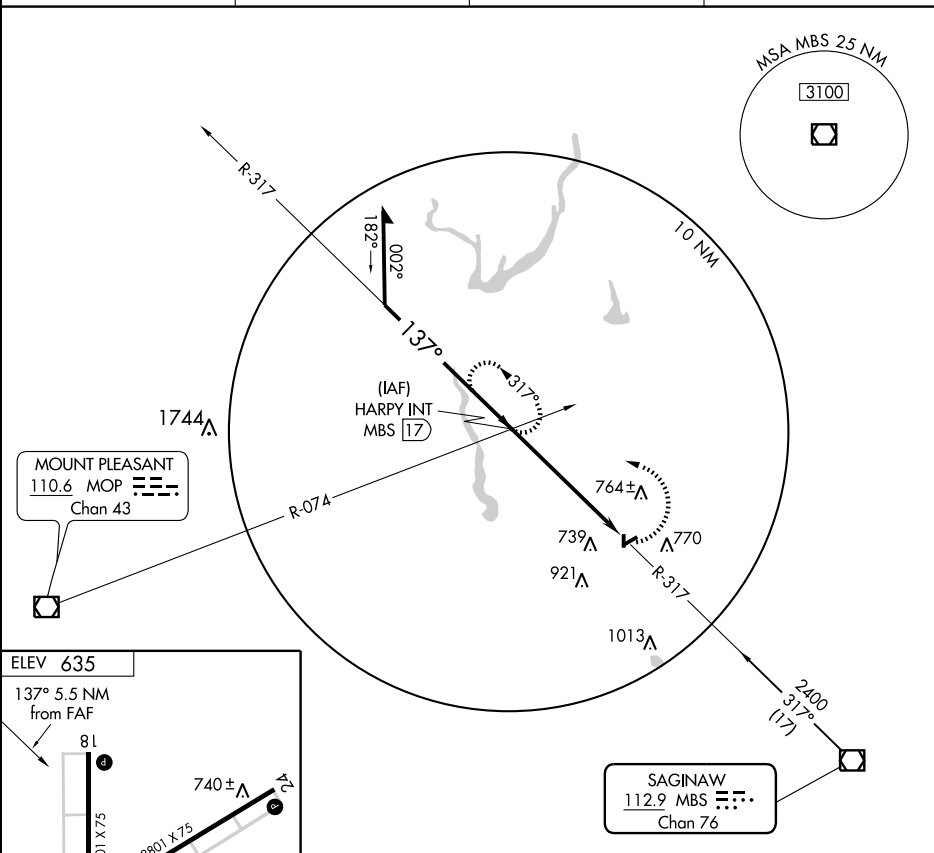
MISSED APPROACH: Climbing left turn to 2400 via heading 272° and MBS VOR/DME R-317 to HARRY INT/17 DME and hold.

AWOS-3
119.525

SAGINAW APP CON ★
126.45 235.625

GCO
121.725

UNICOM
122.8 (CTAF)



REIL Rwys 6, 18, 24 and 36
MRL Rwy 6-24 and 18-36

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

Remain within 10 NM		HARRY INT MBS 17		2400 HDG 272°	MBS R-317 112.9	HARRY INT	
2400		317°		MBS 11.5			
137°		2400					
		5.5 NM					
CATEGORY	A		B		C		D
CIRCLING	1140-1		505 (600-1)		1140-1½ 505 (600-1½)		NA

MIO

OSCODA CO (51M) 2N UTC-5(-4DT) N44°40.83' W84°07.50'

LAKE HURON

1050 NOTAM FILE LAN

Rwy 09-27: 2800X90 (DIRT) LIRL

Rwy 09: Thld dsplcd 978'. Trees.

Rwy 27: Thld dsplcd 784'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Dec thru Apr except PPR; confirm rwy condition. Rwy 09-27 sfc rough with large areas of soft sand on rwy. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27—CTAF.

COMMUNICATION: CTAF 122.9

MONROE

CUSTER (TTF) 2 NW UTC-5(-4DT) N41°56.39' W83°26.08'

DETROIT

616 B S4 **FUEL** 100LL, JET A OX 1 NOTAM FILE TTF

COPTER

Rwy 03-21: H4997X100 (ASPH) S-60, D-80 MIRL

L-28J

Rwy 03: VASI(V2L)—GA 4.0° TCH 49'. Trees.

IAP

Rwy 21: REIL. PAPI(P2L)—GA 3.5° TCH 42'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. ACTIVATE MIRL Rwy 03-21, REIL Rwy 21, VASI Rwy 03 and PAPI Rwy 21—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.075 (734) 384-0259.

COMMUNICATIONS: CTAF/UNICOM 122.7

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

® **DETROIT APP/DEP CON** 134.3

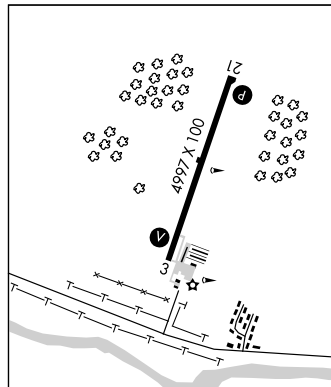
GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88'

W83°27.45' 174° 6.6 NM to fld. 629/3W.

HIWAS.



MOORESTOWN AIRPARK (6YØ) 1 SE UTC-5(-4DT) N44°27.75' W84°59.75'

LAKE HURON

1213 NOTAM FILE LAN

Rwy 03-21: 2797X100 (TURF)

Rwy 03: Thld dsplcd 799'. Tree.

Rwy 21: Thld dsplcd 998'. Trees.

Rwy 09-27: 2599X100 (TURF)

Rwy 09: Thld dsplcd 399'. Trees.

Rwy 27: Thld dsplcd 429'. Road.

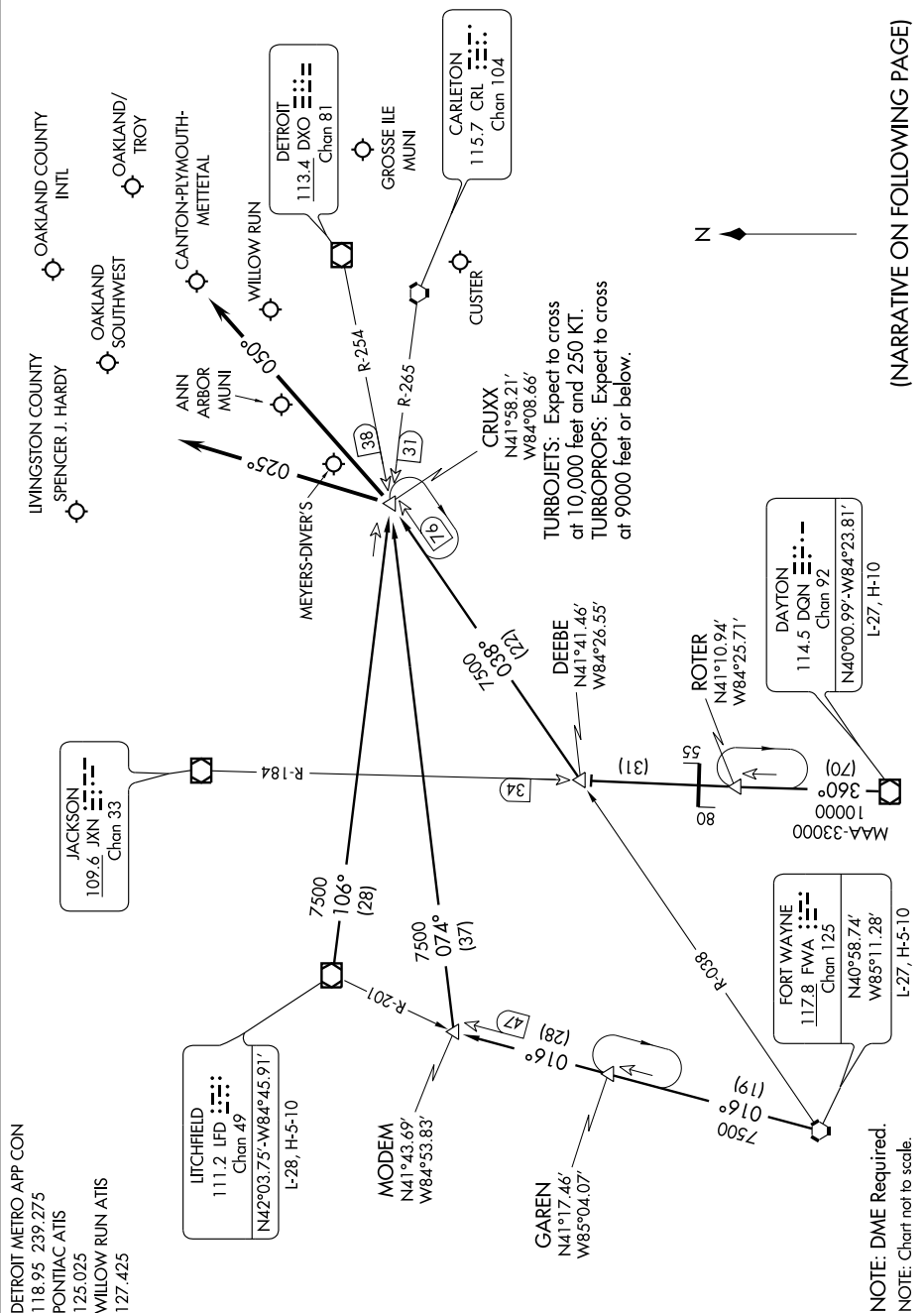
AIRPORT REMARKS: Attended Apr-Nov dawn-dusk. No snow removal in winter. Open winter months to ski equipped acft only. Rwy 03-21 marked with 3' yellow cones. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

APP CRS 027°	Rwy Idg 4997
	TDZE 614
	Apt Elev 616

RNAV (GPS) RWY 3

MONROE/CUSTER (TTF)

▼ When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 60 feet,
▲ LNAV Cat C/D visibility ¼ mile, and Circling Cat C visibility ¼ mile.
 Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

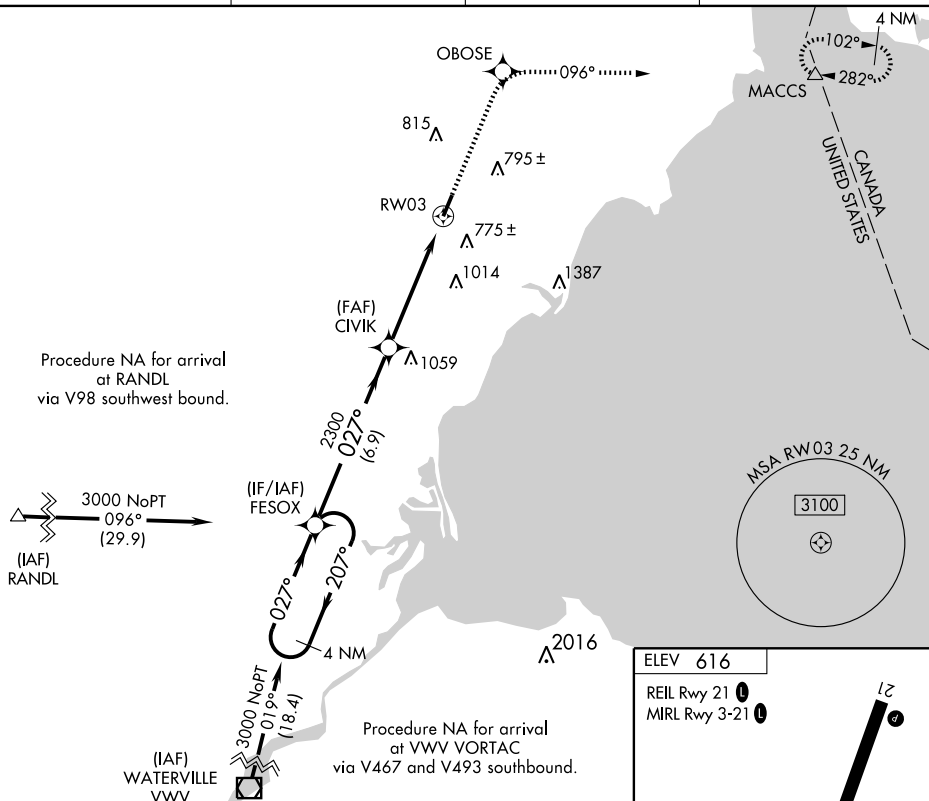
MISSED APPROACH: Climb to 3000
 direct OBOSE and via 096° track to
 MACCS and hold.

AWOS-3
119.075

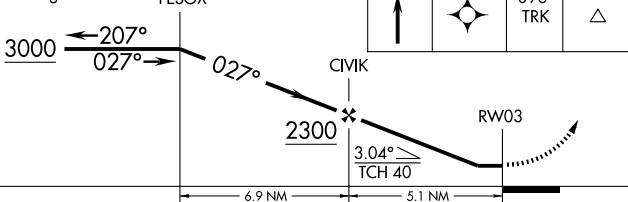
DETROIT APP CON
134.3 363.2

GCO
121.725

UNICOM
122.7 (CTAF) 0



4 NM Holding Pattern FESOX VGSi and descent angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	1100-1	486 (500-1)	1100-1½ 486 (500-1¼)	1100-1½ 486 (500-1½)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1½ 564 (600-1½)	1180-2 564 (600-2)

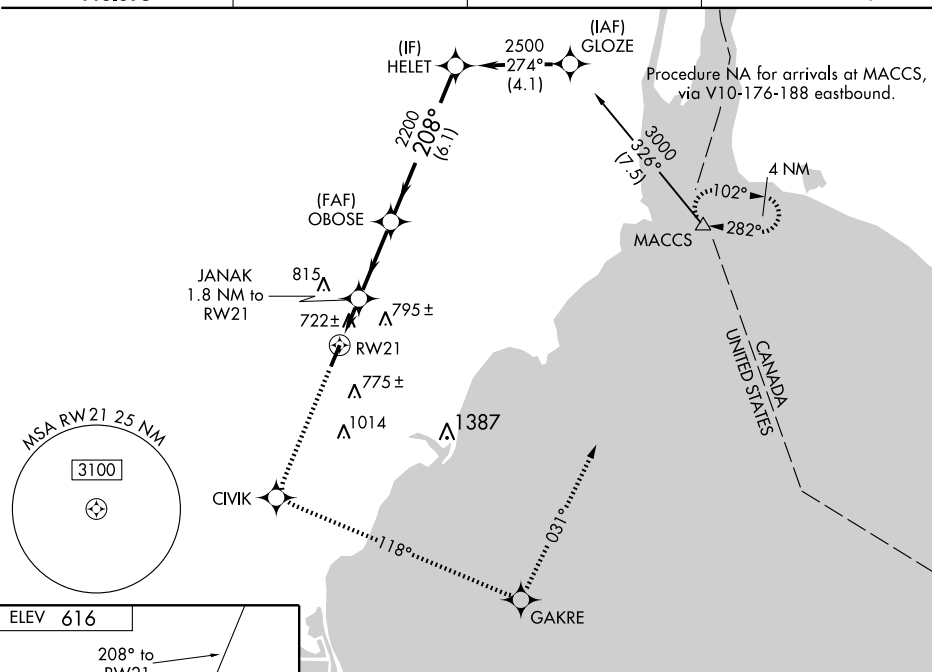
WAAS CH 86707 W21A	APP CRS 208°	Rwy ldg TDZE Apt Elev	4997 616 616
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 21

MONROE/CUSTER (TTF)

⚠ When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase LPV DA 43 feet and all visibilities $\frac{1}{4}$ mile, LNAV/VNAV DA 138 feet and all visibilities $\frac{1}{2}$ mile and all MDA 60 feet and Cat C visibilities $\frac{1}{4}$ mile. Baro-VNAV and VDP NA when using Detroit Metropolitan Wayne County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

MISSED APPROACH:
Climb to 3000 direct CIVIK and via 118° track to GAKRE and via 031° track to MACCS and hold.

AWOS-3
119.075DETROIT APP CON
134.3 363.2GCO
121.725UNICOM
122.7 (CTAF) ①

ELEV 616

208° to
RWY 21

730±

TDZE
616

4997 x 100

△ 674±

REIL Rwy 21 ①
MIRL Rwy 3-21 ①

3000	CIVIK	GAKRE	MACCS	VGSI and RNAV glidepath not coincident.	HELET
↑	118° TRK	031° TRK	△		
*LNAV only.					
	RWY 21 to RWY 21	JANAK 1.8 NM to RWY 21			
	*0.9 NM	*1.220			
	0.9 NM	0.9 NM	3 NM	6.1 NM	
CATEGORY	A	B	C	D	
LPV DA	966-1 $\frac{1}{4}$ 350 (400-1 $\frac{1}{4}$)				
LNAV/VNAV DA	1009-1 $\frac{1}{2}$ 393 (400-1 $\frac{1}{2}$)				
LNAV MDA	980-1 364 (400-1)				980-1 $\frac{1}{4}$ 364 (400-1 $\frac{1}{4}$)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1 $\frac{1}{2}$ 564 (600-1 $\frac{1}{2}$)	1180-2 564 (600-1)	

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

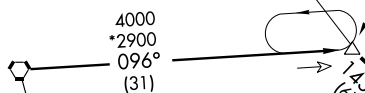
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT
113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFREDGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTETALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

VOR/DME DXO <u>113.4</u> Chn 81	APP CRS 017°	Rwy Idg 4997 TDZE 614 Apt Elev 616
---	------------------------	---

VOR RWY 3
MONROE/CUSTER (TTF)

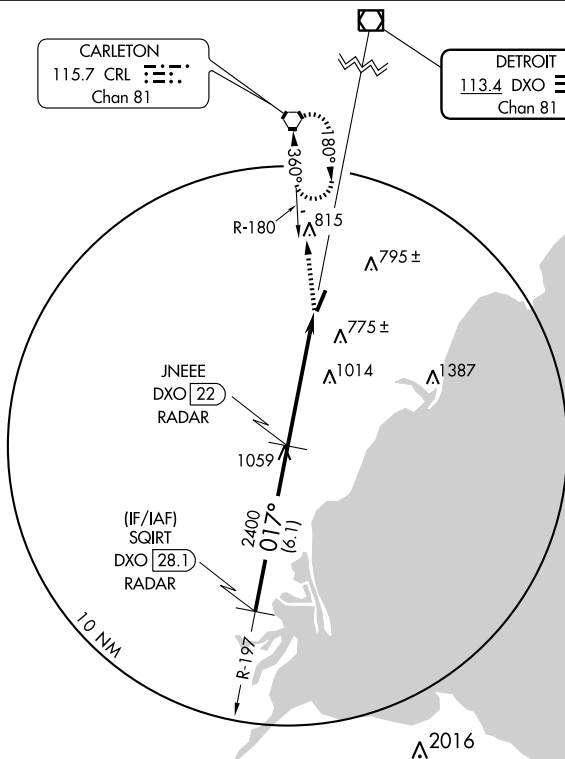
T DME or RADAR required. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDAs 60 feet, and increase Cat C and D visibility $\frac{1}{4}$ mile.

MISSED APPROACH: Climb to 3000
direct CRL VORTAC and hold.

AWOS-3
119.075

DETROIT APP CON
134.3 363.2

GCO
121.725

UNICOM
122.7 (CTAF) **L**

ALTERNATE MISSED
APCH FIX

WINDSOR
YQG 
113.8
Chan 85

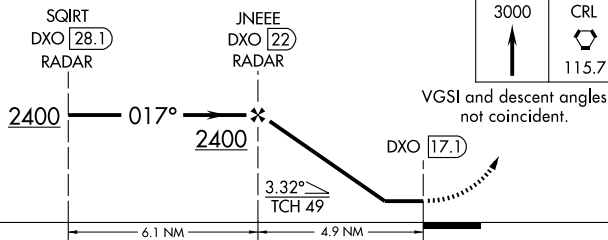
CANADA
UNITED STATES

MSA DXO 25 NM

2400

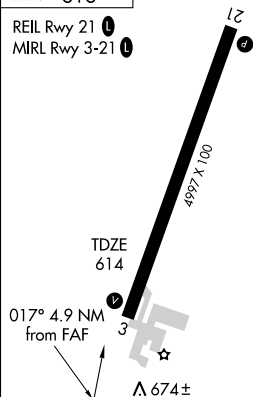
355

RADAR REQUIRED



ELEV 616

REIL Rwy 21 **L**
MIRL Rwy 3-21 **L**



CATEGORY	A	B	C	D
S-3	1320-1	706 (800-1)	1320-2 706 (800-2)	1320-2¼ 706 (800-2¼)
CIRCLING	1320-1	704 (800-1)	1320-2 704 (800-2)	1320-2¼ 704 (800-2¼)

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

MONROE, MICHIGAN
Amdt 2 08213

41°56'N - 83°26'W

MONROE/CUSTER (TTF)
VOR RWY 3

EC-1. 26 AUG 2010 to 23 SEP 2010

VOR/DME DXO
113.4
Chan **81**

APP CRS
196°

Rwy Idg
TDZE
Apt Elev

4997
616
616

VOR RWY 21
MONROE/CUSTER (TTF)

When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 60 feet, and increase Cat C and D visibility ¼ mile. VDP NA when using Detroit Metropolitan Wayne County altimeter setting.

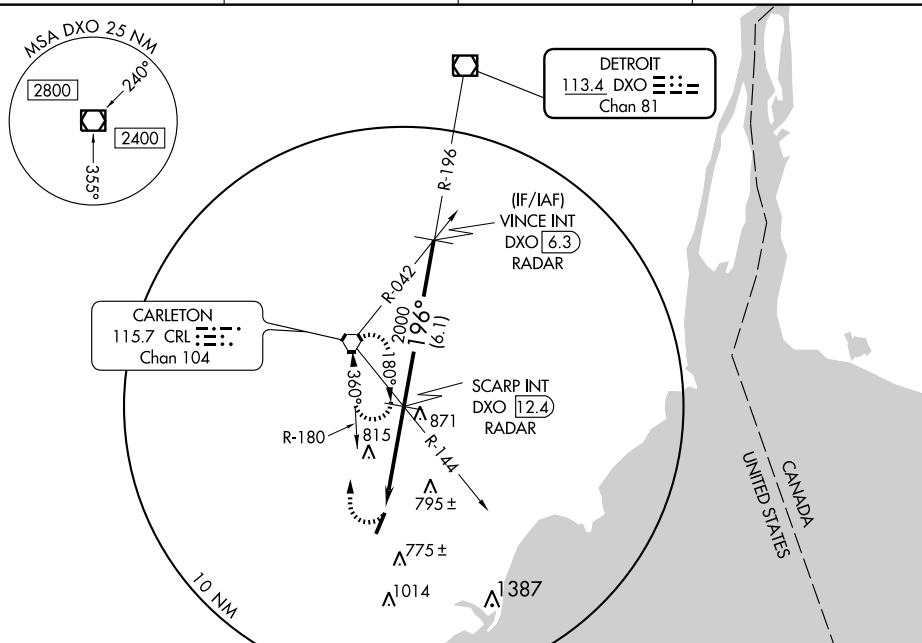
MISSED APPROACH: Climbing right turn to 2600 direct CRL VORTAC and hold.

AWOS-3
119.075

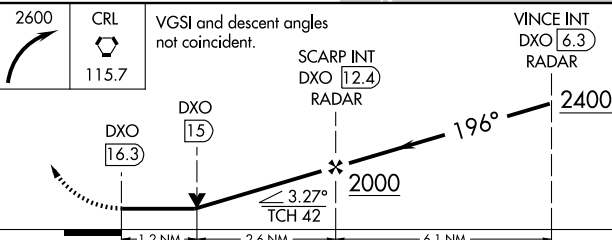
DETROIT APP CON
134.3 363.2

GCO
121.725

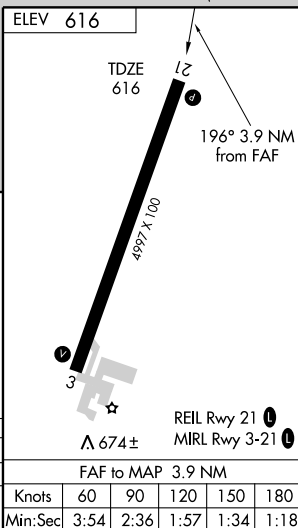
UNICOM
122.7 (CTAF) **0**



RADAR REQUIRED



CATEGORY	A	B	C	D
S-21	1120-1	504 (600-1)	1120-1½	504 (600-1½)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1½ 564 (600-1½)	1180-2 564 (600-2)



MOUNT PLEASANT MUNI (MOP) 2 NE UTC-5(-4DT) N43°37.30' W84°44.24'

755 B S4 FUEL 100LL, JET A NOTAM FILE MOP

RWY 09-27: H5001X100 (ASPH) S-50, D-65, 2S-82, 2D-118 MIRL

RWY 09: Trees. RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'.

RWY 05-23: 2500X160 (TURF)

RWY 05: Tree. RWY 23: Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Fuel 24 hour major credit card self svc. Deer and birds on and in/ovf arpt. Parachute Jumping. Rwy 27 noise abatement: climb to 1500' AGL before turning over city. Rwy 05-23 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 09-27, REIL Rwy 27 and PAPI Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 110.6 MOP (989) 773-2885.**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.6 (LANSING RADIO)

⑧ SAGINAW APP/DEP CON 126.45 (1100-0400Z±)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

(L) VORW/DME 110.6 MOP Chan 43 N43°37.37'

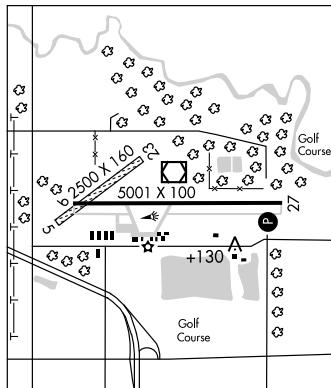
W84°44.24' at fld. 752/5W. AWOS-3.

DME portion unusable byd 33 NM blo 4000'.

DETROIT

H-2K, 10F, L-28J

IAP

**MUNISING****HANLEY FLD** (5Y7) 3 SE UTC-5(-4DT) N46°21.25' W86°37.26'

GREEN BAY

984 B NOTAM FILE GRB

RWY 18-36: 4000X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly May-Nov. Arpt CLOSED Nov-May 14. Birds and deer on and in/ovf arpt. Rwy 18-36 marked with cones.

COMMUNICATIONS: CTAF 122.9

APP CRS **096°**
 Rwy Idg **5001**
 TDZE **755**
 Apt Elev **755**

RNAV (GPS) RWY 9

MOUNT PLEASANT MUNI (MOP)

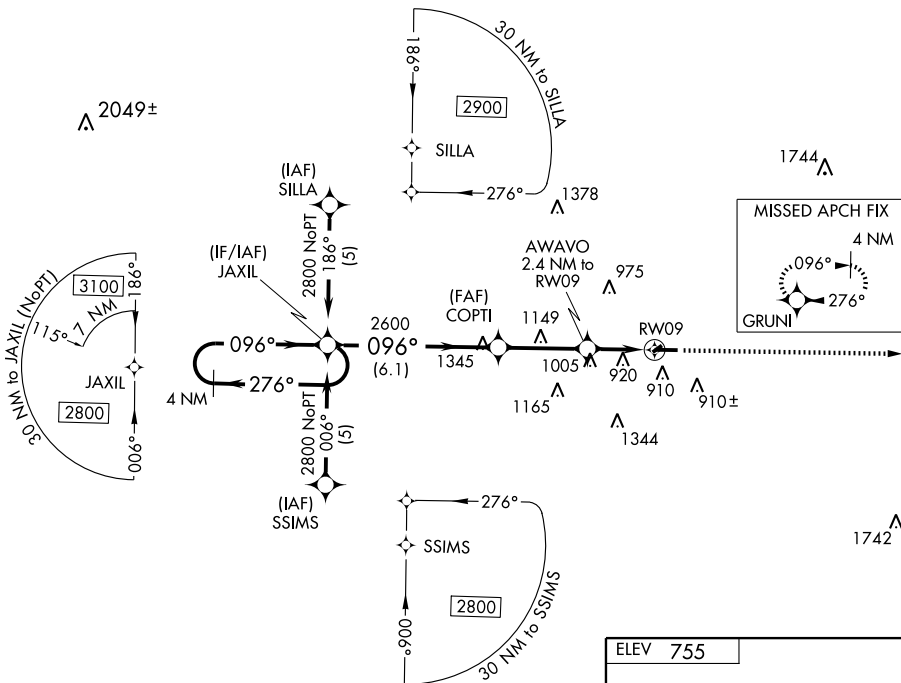
▽ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Alma altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2800 direct GRUNI and hold.

AWOS-3
110.6

SAGINAW APP CON ★
126.45 235.625

UNICOM
123.0 (CTAF) 0



4 NM
 Holding Pattern

JAXIL

2800 ← 276°
 096° →

096°

COPTI

2600

3.05° TCH 40

AWAVO 2.4 NM to RW09

1540

2.4 NM

6.1 NM

3.2 NM

2.4 NM

2800 GRUNI

096° to RW09

TDZE 755

2500 X 160

5001 X 100

27

CATEGORY	A	B	C	D
LNAV MDA	1320-1 565 (600-1)	1320-1½ 565 (600-1½)	1320-1¾ 565 (600-1¾)	1320-2 605 (700-2)
CIRCLING	1320-1 565 (600-1)	1320-1½ 565 (600-1½)	1320-1¾ 565 (600-1¾)	1320-2 605 (700-2)

ELEV 755

REIL Rwy 27 0
 MIRL Rwy 9-27 0

WAAS CH 82613 W27A	APP CRS 276°	Rwy Idg TDZE Apt Elev	5001 753 755
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 27

MOUNT PLEASANT MUNI (MOP)

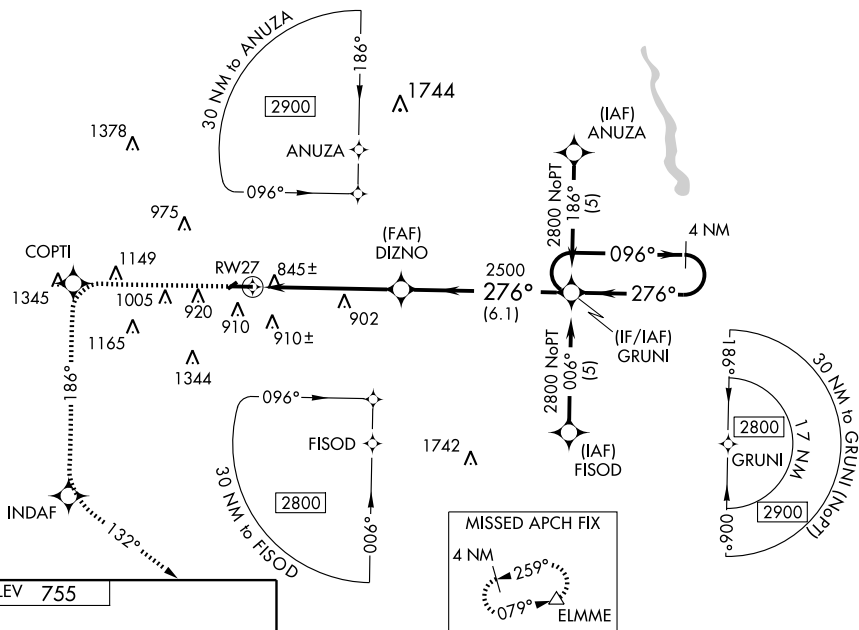
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Alma altimeter setting and increase all DA 42 feet and all MDA 60 feet, increase LPV, LNAV/VNAV all Cats, LNAV Cat D and Circling Cat C visibilities ¼ mile. Baro-VNAV and VDP NA when using Alma altimeter setting.

MISSED APPROACH: Climb to 3000 direct COPTI and via 186° track direct INDAP and via 132° track to ELMME and hold.

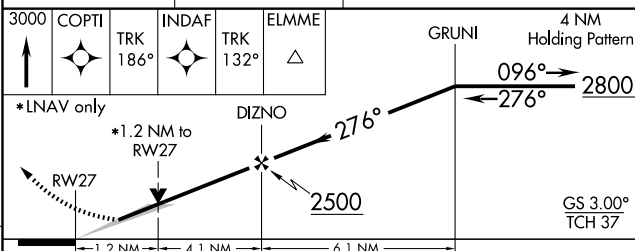
AWOS-3
110.6

SAGINAW APP CON ★
126.45 235.625

UNICOM
123.0 (CTAF) 0



ELEV 755



CATEGORY	A	B	C	D
LPV DA	1099-1¼ 346 (400-1¼)			
LNAV/VNAV DA	1201-1½ 448 (500-1½)			
LNAV MDA	1160-1	407 (500-1)	1160-1¼	407 (500-1¼)
CIRCLING	1220-1	465 (500-1)	1320-1½ 565 (600-1½)	1360-2 605 (700-2)

REIL Rwy 27 0
MIRL Rwy 9-27 0

VOR/DME MOP 110.6 Chan 43	APP CRS 284°	Rwy Idg TDZE Apt Elev	5001 753 755
---	------------------------	-----------------------------	---

VOR RWY 27

MOUNT PLEASANT MUNI (MOP)

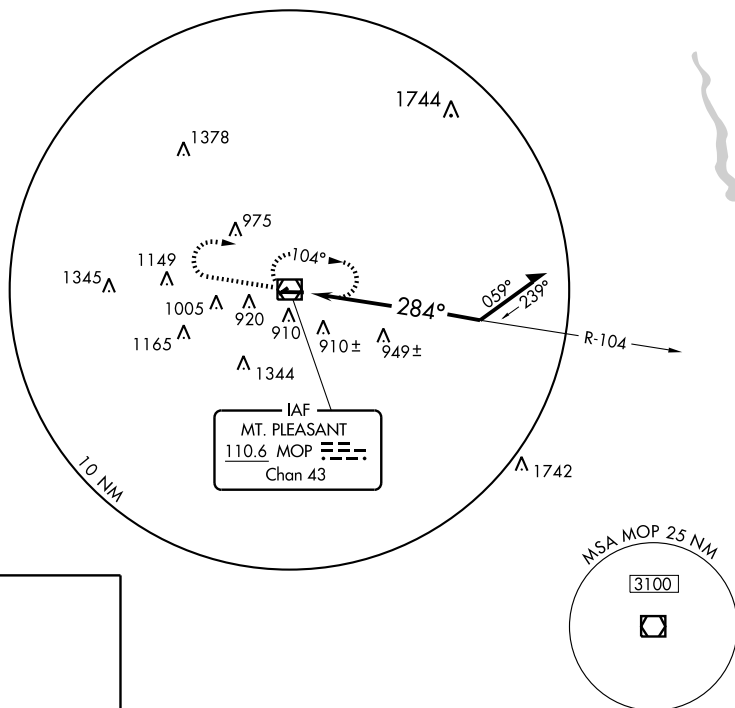
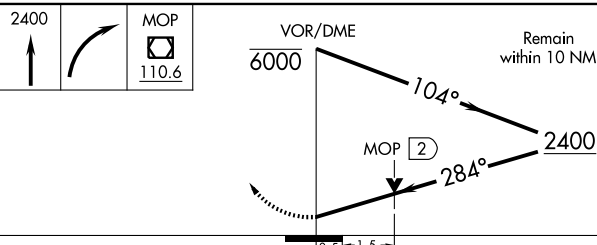
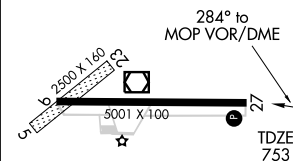
▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Alma altimeter setting and increase all MDA 60 feet, S-27 Cat D and Circling Cat C visibilities ¼ mile. VDP NA when using Alma altimeter setting.

MISSED APPROACH: Climb to 2400 then right turn direct MOP VOR/DME and hold.

AWOS-3
110.6

SAGINAW APP CON ★
126.45 235.625

UNICOM
123.0 (CTAF) 0

ELEV **755**

REIL Rwy 27 0
MIRL Rwy 9-27 0

CATEGORY	A	B	C	D
S-27	1260-1 507 (600-1)		1260-1½ 507 (600-1½)	
CIRCLING	1260-1 505 (600-1)		1320-1½ 565 (600-1½)	1360-2 605 (700-2)

MOUNT PLEASANT, MICHIGAN

Amdt 1 09239

MOUNT PLEASANT MUNI (MOP)

43°37'N - 84°44'W

VOR RWY 27

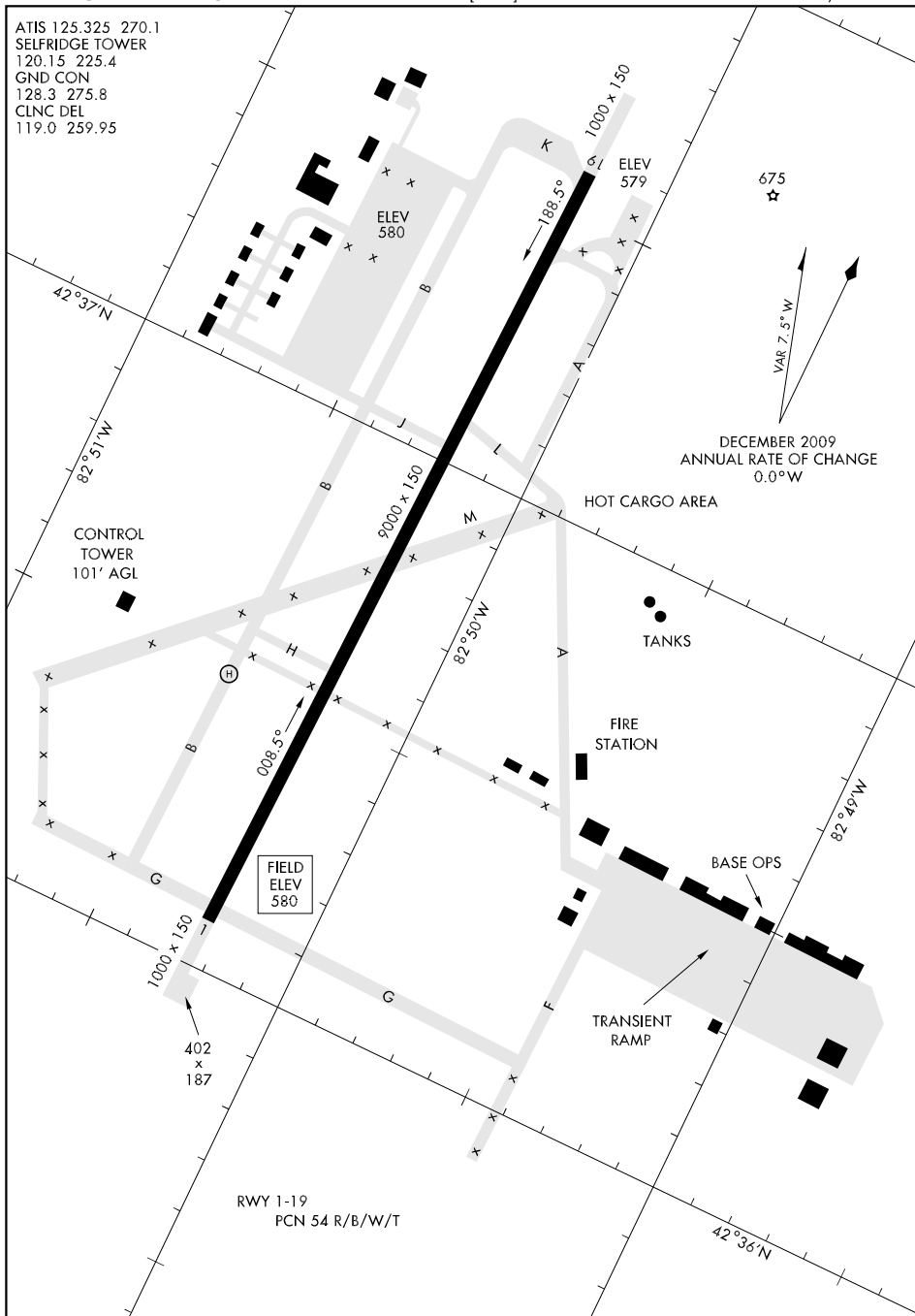
AIRPORT DIAGRAM

AFD-276 [USAF]

SELFRIIDGE ANGB (KMTG)

MT. CLEMENS, MICHIGAN

ATIS 125.325 270.1
 SELFRIIDGE TOWER
 120.15 225.4
 GND CON
 128.3 275.8
 CLNC DEL
 119.0 259.95



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

MT. CLEMENS, MICHIGAN
 SELFRIIDGE ANGB (KMTG)

SEBEWAING (98G) OW UTC-5(-4DT) N43°43.75' W83°27.75'

DETROIT

584 **FUEL** 100LL NOTAM FILE LAN

Rwy 18-36: H2178X50 (ASPH) S-10 LIRL

Rwy 18: Trees. **Rwy 36:** Thld dsplcd 245'. Railroad.

Rwy 06-24: 2150X130 (TURF)

Rwy 06: Brush. **Rwy 24:** Thld dsplcd 483'. Railroad.

AIRPORT REMARKS: Attended irregularly. For fuel call 989-883-3787 or 989-550-1145. Rwy 06-24 not plowed winter months, may be wet or unusable during spring thaw. Seagulls and deer on and invof rws. Rwy 06-24 marked with 3' cones. Rwy 18-36 numerous cracks, vegetation and deterioration. ACTIVATE LIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

SELFPRIDGE ANGB (MTC)(KMTCT) ANG (ARNG) 2 NE UTC-5(-4DT)

DETROIT

N42°36.50' W82°50.13'

580 B TPA—See Remarks NOTAM FILE MTC Not insp.

H-106, L-28J, A

Rwy 01-19: H900X150 (PEM) S-85, D-220, 2D-380, 2D/2D2-800 PCN 54 R/B/W/T HIRL

DIAP, AD

Rwy 01: SALS. REIL. PAPI(P4R)—GA 3.0° TCH 52'. Rgt tfc.

Rwy 19: ALSF1. REIL. PAPI(P4R)—GA 3.0° TCH 52'. Rgt tfc.

MILITARY SERVICE: LGT When twr clsd ACTIVATE arpt lgt freq 120.15.

JASU 1(M32A-60) 1(A/M32A-86D) 1(MC-11) **FUEL** J8. Avbl Mon-Fri 1200-0300Z, Sat-Sun 1430-2100Z, closed holidays. **FLUID** SP PRESAIR LPOX LOX HPOX **OIL** O-128-133-148 SOAP. SOAP Mon-Fri 1215-2100Z, other times DSN 273-5777. **TRAN ALERT** Opr 1230-0130Z clsd hol. Ltd fleet scv avbl prior notice required ctc DSN 273-5640 or C586-239-5640.

MILITARY REMARKS: Opr 1230-0400Z, clsd hol. Other times uncontrolled for Department of Homeland Security, ARNG, USCG or emergency ops. See FLIP AP/1 Supplementary Arpt Remark. **RSTD** Hazardous cargo pad can accommodate C130 and ltd C17 use. No tie downs on pad. No long term parking that location. Helipad on Twy B day VFR only. PPR all acft, DSN 273-5322/4402. **CAUTION** Moderate bird activity common. Twy B btn Twy H and 500' north of Twy J not visible from twr. **TFC PAT** TPA—Fighter rectangular and clsd 2200(1620), all others 1700(1120). **MISC** VIP acft ctc PTD 30 minutes prior to arrival with firm chock time. Base OPS DSN 273-5322, C586-307-5322, fax DSN 273-5814, C586-239-5814; NOTAM DSN 273-4069, C586-239-4069. Snow removal accomplished 1215-2100Z weekdays. Tran acft req use of Selfridge ANGB Drop Zones (DZs). Rwy 01-19 transversely grooved. Rwy 01-19 S 1500' concrete, center 5700' asphalt, N 1800' concrete. Rwy 01-19 S overrun hardened may be used for tkf, day VFR condition only.

COMMUNICATIONS: ATIS 125.325 270.1 PTD 134.85 372.2

Ⓡ **APP CON** 119.6 318.2 (1230-0400Z), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc Ⓡ **CLEVELAND CENTER APP CON** 127.7 308.7.

TOWER 120.15 225.4 **GND CON** 128.3 275.8 **CLNC DEL** 119.0 259.95

Ⓡ **DEP CON** 119.6 391.9 (1230-0400Z), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc

CLEVELAND CENTER DEP CON 127.7 290.425.

PSMV METRO 342.5 (Full svc avbl 1000-0400Z, clsd hol.)

WING COMD POST (QUARTERBACK Control) 311.0 321.0

SELFPRIDGE 120.15 **USCG DETROIT AIR** 381.8X 5692X

AIRSPACE: CLASS D svc continuous.

RADIO AIDS TO NAVIGATION: NOTAM FILE MTC.

(L) **TACAN** Chan 64 MTC (133.7) N42°36.78' W82°49.91' at fld. 580/6W. No NOTAM MP Thu 1300-1500Z (1500/3).

TACAN unusable:

020-345° byd 20 NM blo 3,000' 345°-020° byd 30 NM blo 3,000'

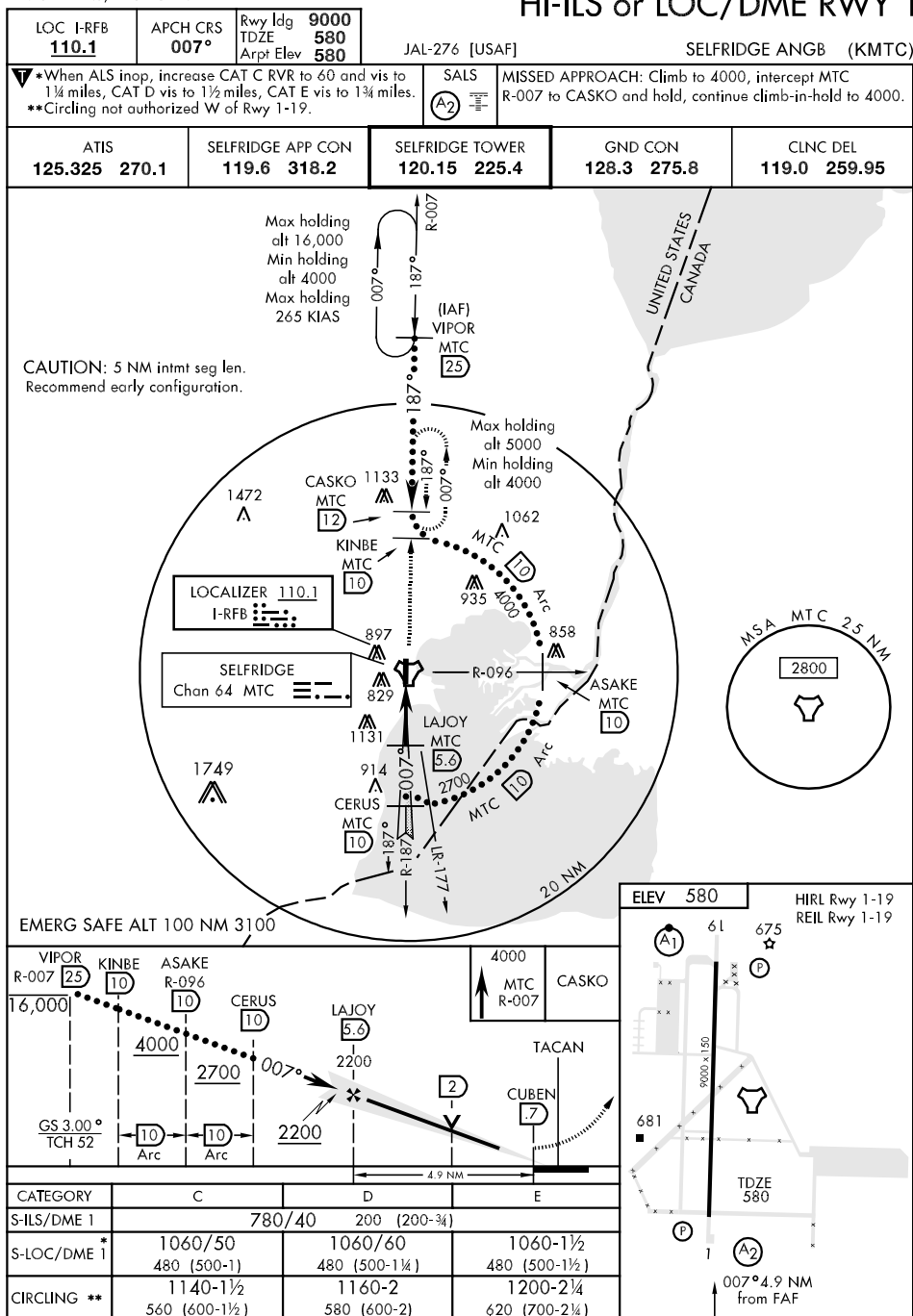
ILS 110.1 I-RFB Rwy 01. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z (1500/3), Glide Slope Wed 1300-1700Z (1500/3).

ILS 110.1 I-MTC Rwy 19. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z (1500/3), Glide Slope Wed 1300-1700Z (1500/3).

COMM/NAV/WEATHER REMARKS: VFR ARR contact Selfridge App Con 30 NM out 119.6 318.2.

SHAMROCK FLD (See BROOKLYN)

SHARPE'S STRIP (See EMMETT)



LOC I-MTC 110.1	APCH CRS 187°	Rwy Idg TDZE 579 Arpt Elev 580
---------------------------	-------------------------	--

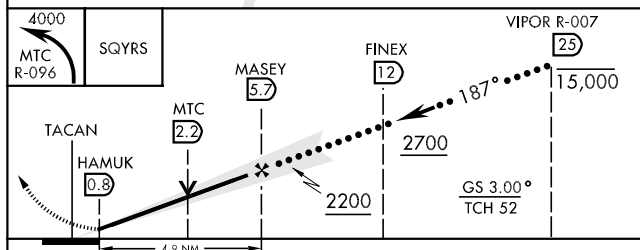
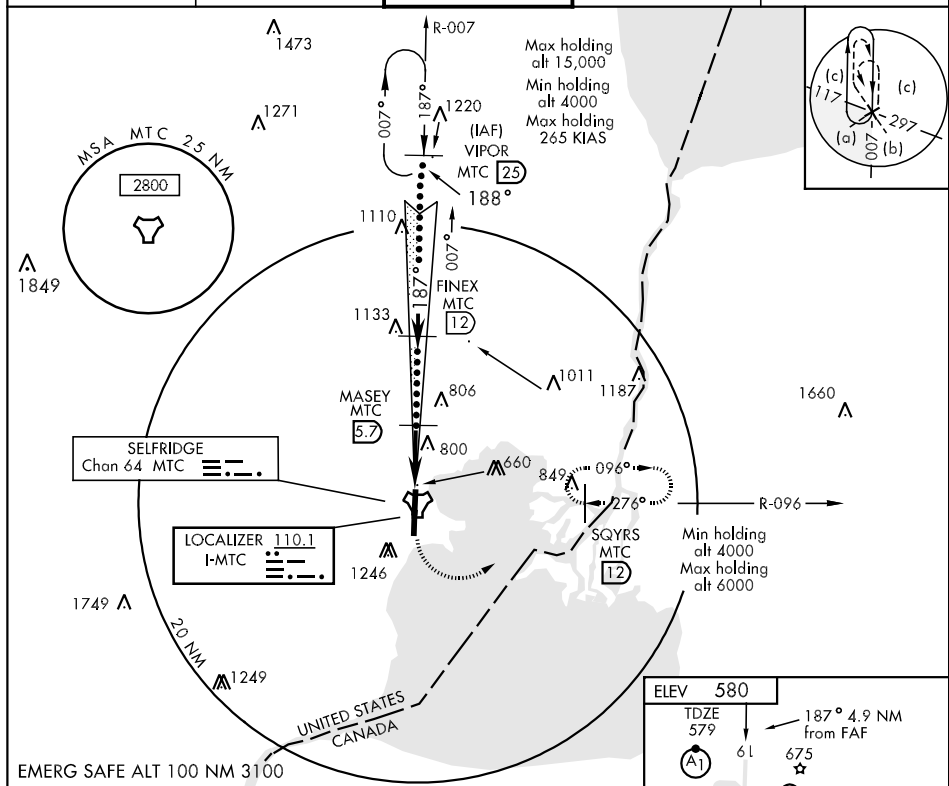
JAL-276 [USAF]

SELFDRIDGE ANGB (KMTC)

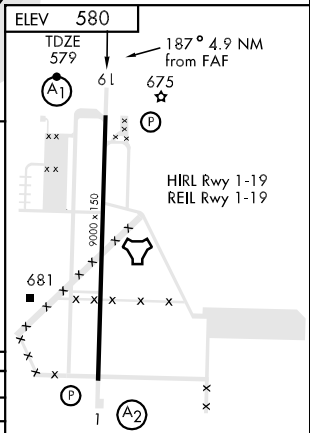
▼ ** When ALS inop, increase RVR to 50 and vis to 1 mile.
 ** When ALS inop, increase CAT CD vis to 1½ miles, CAT E vis to 1¾ miles.
 *** Circling not authorized W of Rwy 1-19.

ALSF-1
 MISSED APPROACH: Climbing left turn to 4000; intercept MTC R-096 to SQYRS and hold, continue climb-in-hold to 4000..


ATIS 125.325 270.1	SELFDRIDGE APP CON 119.6 318.2	SELFDRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
------------------------------	--	---	-------------------------------	---------------------------------

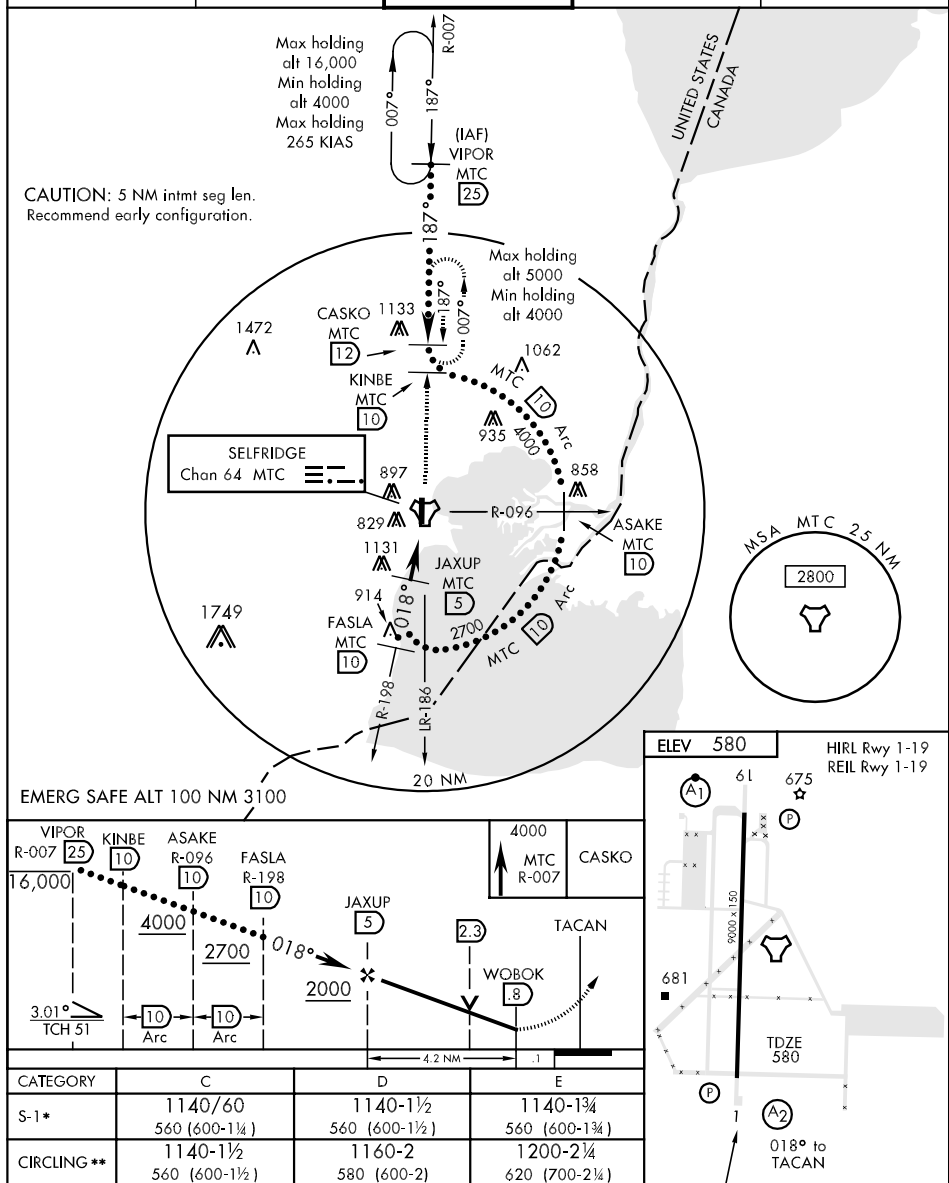


CATEGORY	C	D	E
S-ILS 19 *	882/40	303 (400-¾)	
S-LOC 19 **	1080/50	501 (500-1)	1080/60 501 (500-1¼)
***	1140-1½ 560 (600-1½)	1160-2 580 (600-2)	1200-2¼ 620 (700-2¼)
CIRCLING			



FAF to MAP 4.9 NM					
Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

TACAN MTC Chan 64		APCH CRS 018°		Rwy Idg 9000 TDZE 580 Arpt Elev 580		JAL-276 [USAF]		SELF RIDGE ANGB (KMTCT)	
▽ *When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles. **Circling not authorized W of Rwy 1-19.						SALTS 		MISSED APPROACH: Climb to 4000 and intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.	
ATIS 125.325 270.1		SELF RIDGE APP CON 119.6 318.2		SELF RIDGE TOWER 120.15 225.4		GND CON 128.3 275.8		CLNC DEL 119.0 259.95	



42°36'N-82°50'W

Orig 09351

SELFDRIDGE ANGB (KMTC)

HI-TACAN RWY 1

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

SELFRIDGE ANGB (KMTC)

MISSED APPROACH: Climb to 1300 then climbing left turn to 4000, intercept MTC TACAN R-096 to SQYRS and hold. continue climb-in-hold to 4000.

Max holding alt 16,000
Min holding alt 4000
Max holding 265 KIAS

(IAF) VIPOR MTC 25

TOPAE MTC 12

BKKUS MTC 5

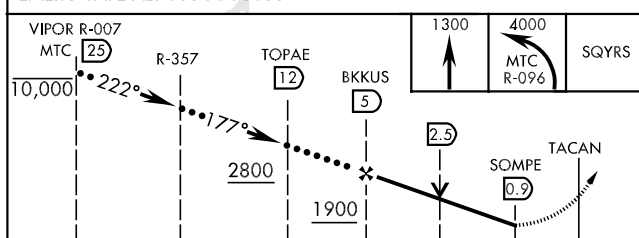
SELFRIDGE Chan 64 MTC

SQYRS MTC 12

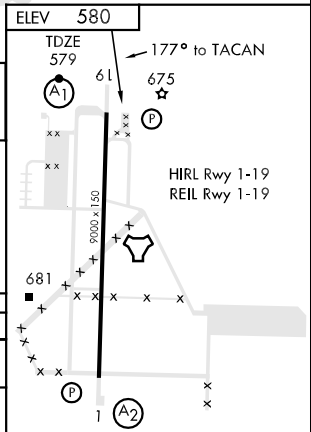
MSA MTC 2.5 NM 2800

UNITED STATES CANADA

EMERG SAFE ALT 100 NM 3100



CATEGORY	C	D	E
S- 19 *	1180/60 601 (600-1¼)	1180-1½ 601 (600-1½)	1180-1¾ 601 (600-1¾)
CIRCLING **	1180-1¾ 600 (600-1¾)	1180-2 600 (600-2)	1200-2 ¼ 620 (700-2¼)



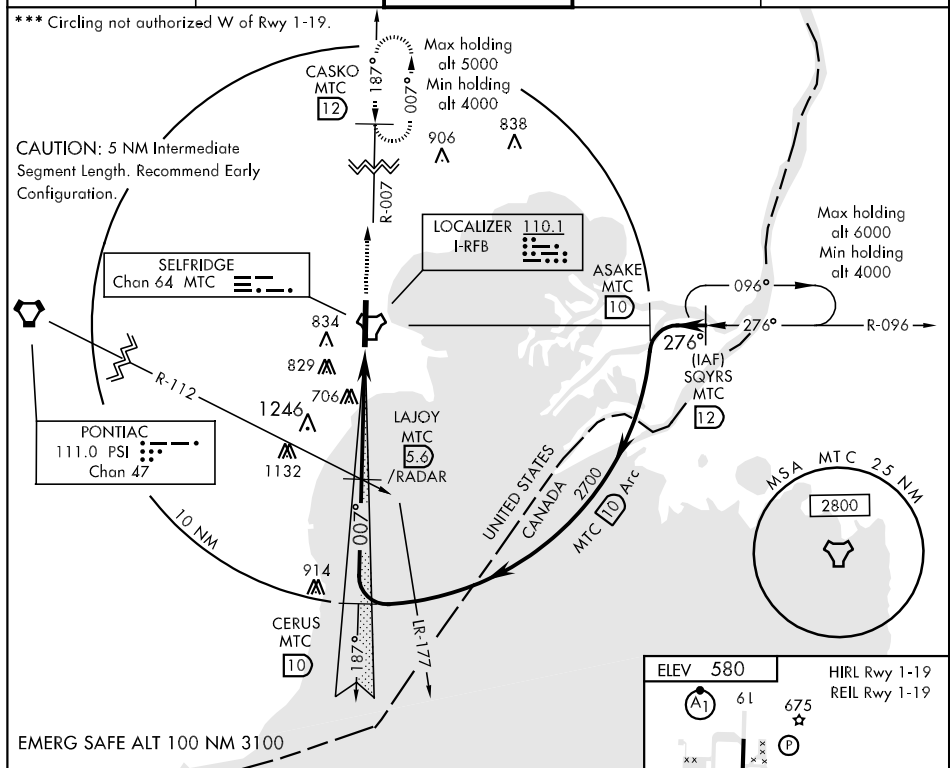
EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

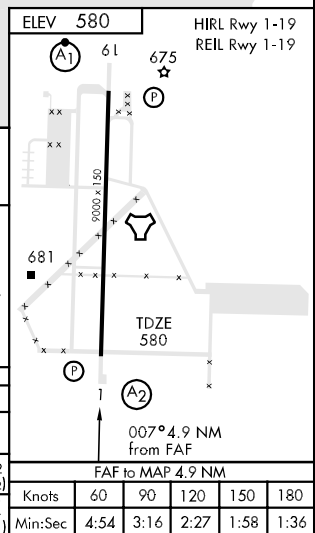
LOC I-RFB 110.1	APCH CRS 007°	Rwy Idg TDZE Arpt Elev 9000 580 580	AL-276 [USAF]	SELRIDGE ANGB (KMTCT)
---------------------------	-------------------------	---	---------------	-----------------------

▼*When ALS inop, increase CAT AB RVR to 40 and vis to $\frac{3}{4}$ mile.
 **When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to $1\frac{1}{4}$ mile, CAT D vis to $1\frac{1}{2}$, CAT E vis to $1\frac{3}{4}$.
 SALs MISSED APPROACH: Climb to 4000, intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.

ATIS 125.325 270.1	SELRIDGE APP CON 119.6 318.2	SELRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
------------------------------	--	---------------------------------------	-------------------------------	---------------------------------



SQYRS R-096 (12) 4000 ASAKE (10) Intcp Lczr CERUS (10) LAJOY (5.6) /RADAR TACAN CUBEN (7) GS 3.00° TCH 52 276° 2700 007° 2200 4.9 NM					
CATEGORY	A	B	C	D	E
S-ILS 01*	780/24	200 (200- $\frac{1}{2}$)	780/40	200 (200- $\frac{3}{4}$)	
S-LOC 01**	1060/40	480 (500- $\frac{3}{4}$)	1060/50 480 (500-1)	1060/60 480 (500- $\frac{1}{4}$)	1060- $1\frac{1}{2}$ 480 (500- $\frac{1}{2}$)
CIRCLING***	1140-1	560 (600-1)	1140- $1\frac{1}{2}$ 560 (600- $\frac{1}{2}$)	1160-2 580 (600-2)	1200-2 $\frac{1}{4}$ 620 (700-2 $\frac{1}{4}$)



LOC I-MTC 110.1	APCH CRS 187°	Rwy Idg TDZE Arpt Elev 9000 579 580	AL-276 [USAF]	SELFRIDGE ANGB (KMTC)
---------------------------	-------------------------	---	---------------	-----------------------

▼ * When ALS inop, increase RVR to 50 and vis to 1 mile.

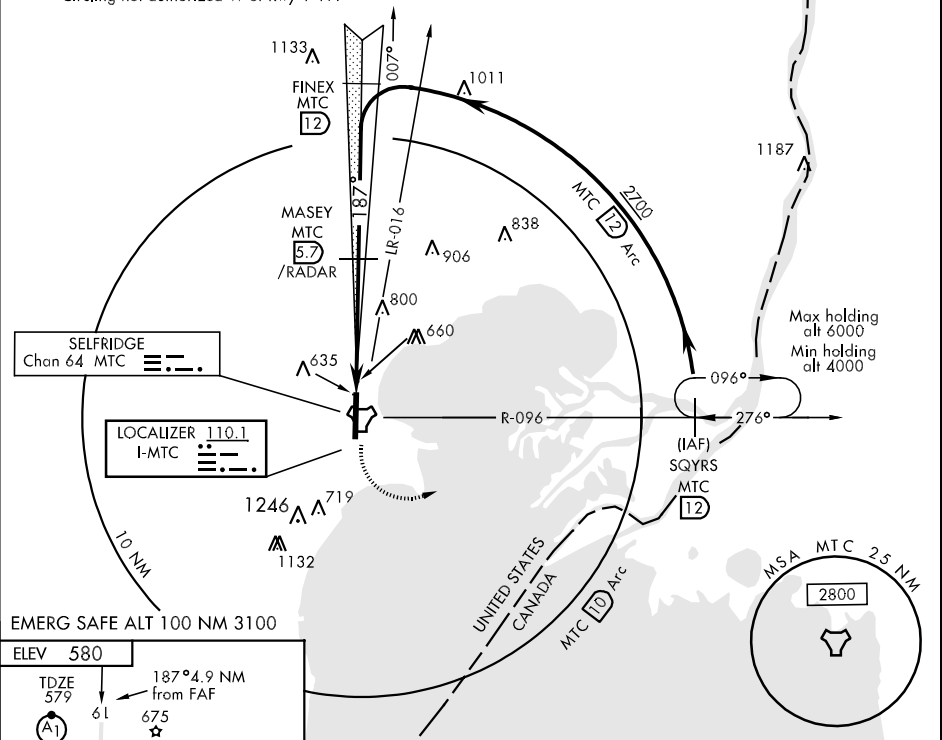


MISSED APPROACH: Climbing left turn to 4000, intercept MTC TACAN R-096 to SQYRS and hold, continue climb-in-hold to 4000.

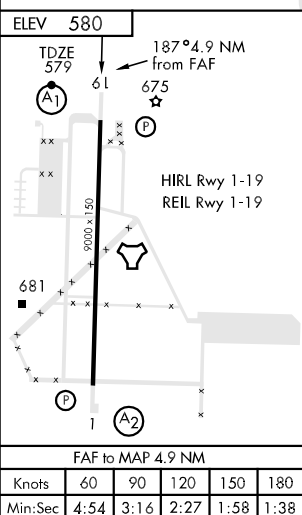
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C/D vis to 1½ miles, CAT E vis to 1¾ miles.

ATIS 125.325 270.1	SELFRIDGE APP CON 119.6 318.2	SELFRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
------------------------------	---	--	-------------------------------	---------------------------------

*** Circling not authorized W of Rwy 1-19.

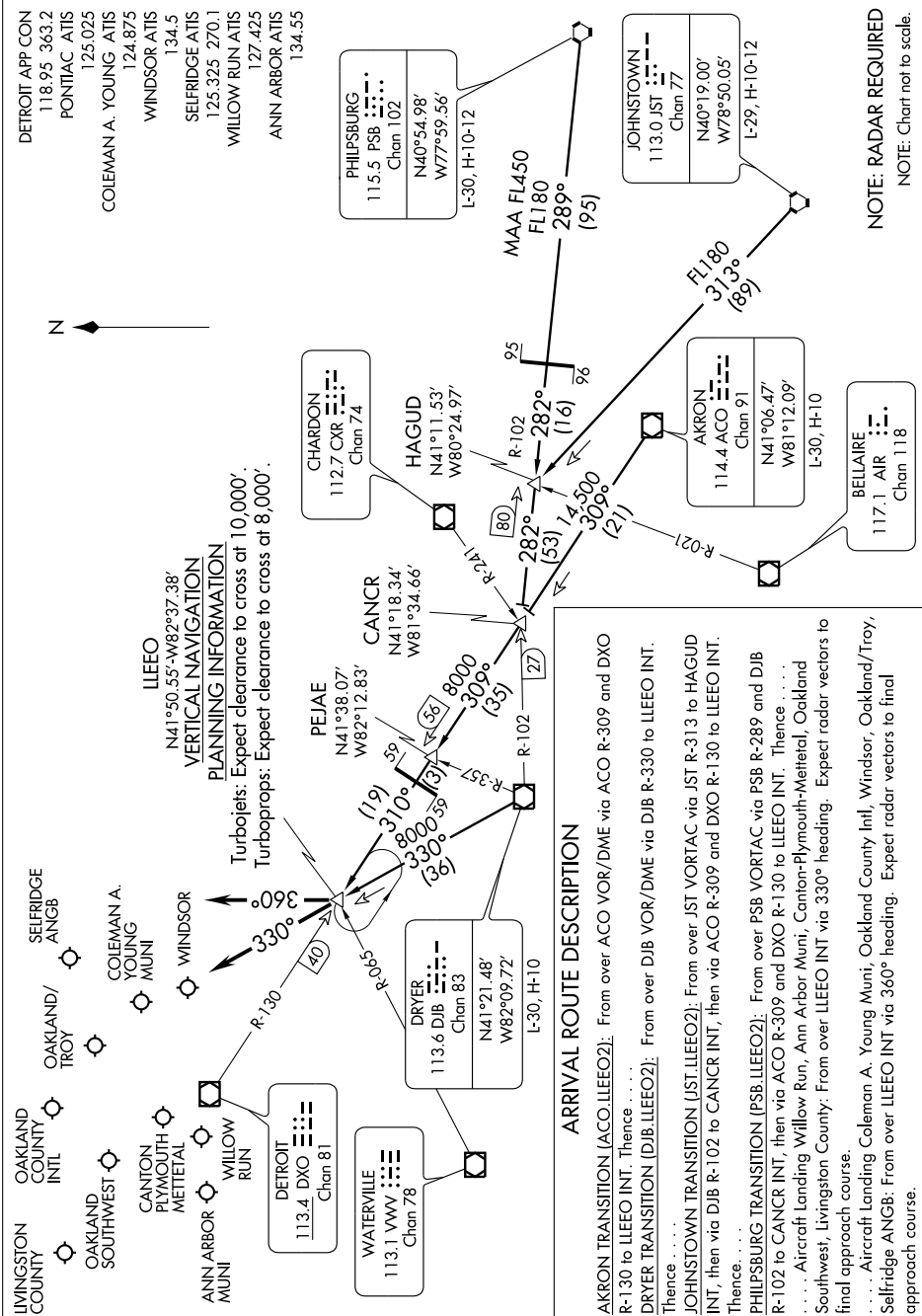


EMERG SAFE ALT 100 NM 3100



4000 MTC R-096	MTC R-096 12	SQYRS	MASEY 5.7 /RADAR	Intcp Lczt FINEX 12	SQYRS R-096 12
TACAN HAMUK 8	2.2	187°	2700	12 Arc	4000
2200	GS 3.00°	TCH 52			
4.9 NM					
CATEGORY	A	B	C	D	E
S-ILS 19*	882/40 303 (400-¾)				
S-LOC 19**	1080/40	501 (500-¾)	1080/50	501 (500-1)	1080/60 501 (500-1¼)
CIRCLING ***	1140-1	560 (600-1)	1140-1½ 560 (600-1½)	1160-2 580 (600-2)	1200-2¼ 620 (700-2¼)

LLEEO TWO ARRIVAL



NOTE: RADAR REQUIRED
NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LLEEO TWO ARRIVAL

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

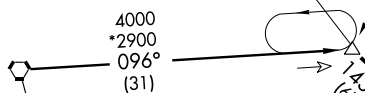
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT
113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFREDGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010


LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

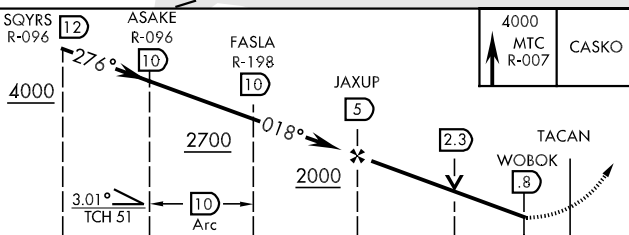
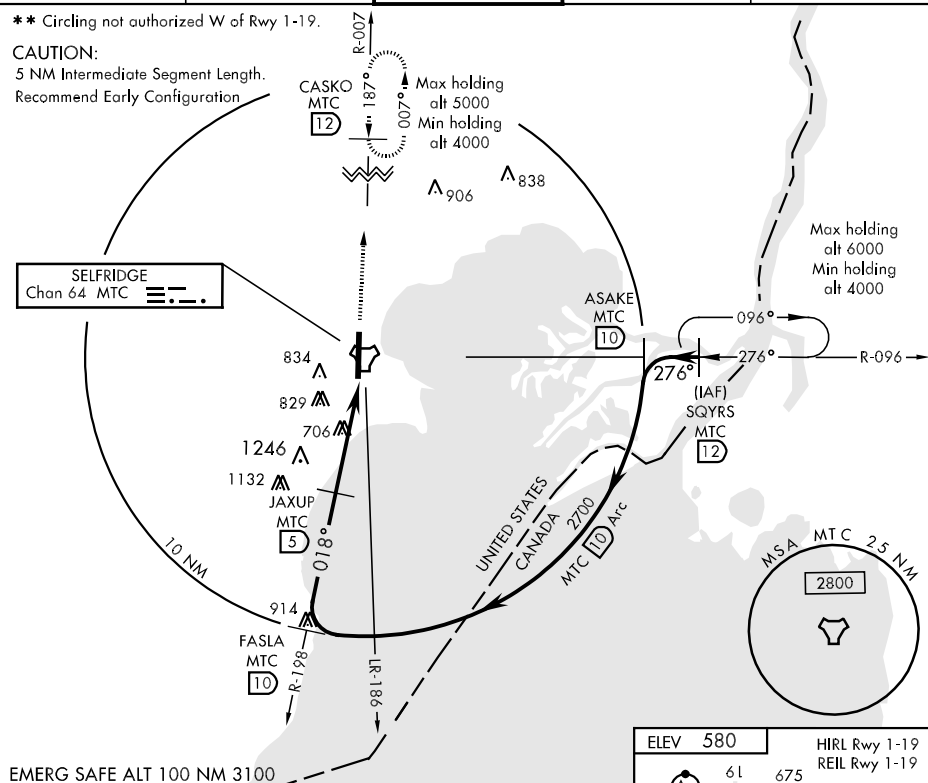
(SPRTN.SPRTN3) 10210

TACAN MTC Chan 64	APCH CRS 018°	Rwy Idg 9000 TDZE 580 Arpt Elev 580	AL-276 [USAF]	SELFDRIDGE ANGB (KMTC)
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.			SALS 	MISSED APPROACH: Climb to 4000, intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.
ATIS 125.325 270.1	SELFDRIDGE APP CON 119.6 318.2	SELFDRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95

** Circling not authorized W of Rwy 1-19.

CAUTION:

5 NM Intermediate Segment Length.
Recommend Early Configuration



CATEGORY	A	B	C	D	E
S-1*	1140/40 560 (600-¾)	1140/60 560 (600-1¼)	1140-1½ 560 (600-1½)	1140-1¾ 560 (600-1¾)	1140-2 560 (600-2)
CIRCLING **	1140-1 560 (600-1)	1140-1½ 560 (600-1½)	1160-2 580 (600-2)	1200-2¼ 620 (700-2¼)	

TACAN MTC Chan 64	APCH CRS 177°	Rwy Idg TDZE Arpt Elev	9000 579 580
-----------------------------	-------------------------	------------------------------	---

AL-276 [USAF]

SELFRIDGE ANGB (KMTC)

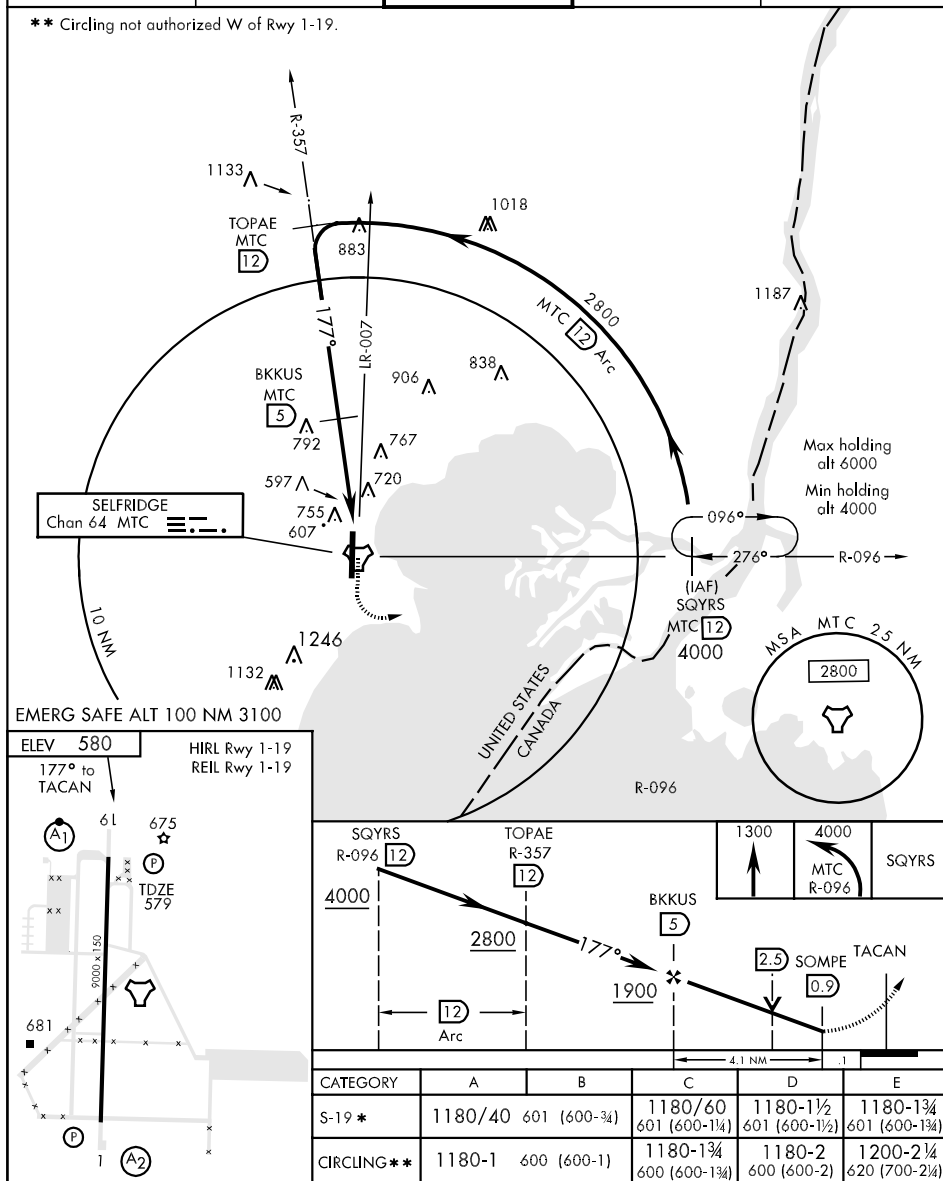
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.



MISSED APPROACH: Climb to 1300 then climbing left turn to 4000, intercept MTC TACAN R-096 to SQYRS and hold, continue climb-in-hold to 4000.

ATIS 125.325 270.1	SELFRIDGE APP CON 119.6 318.2	SELFRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
------------------------------	---	--	-------------------------------	---------------------------------

** Circling not authorized W of Rwy 1-19.



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ATIS
124.3
MUSKEGON TOWER ★
126.25 363.1
GND CON
121.6

FIELD
ELEV
629

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. 
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W

ELEV

ELEV

GENERAL
AVIATION
PARKING

ELEV

TWR

08

1



ERC

TBC

424

5-24
100

4-32

80, [

11

W

COAST GUARD

RWY 06-24
S-100, D-160, 2S-175, 2D-300
RWY 14-32
S-80, D-120, 2S-165, 2D-210

-43°09.5'N¹

AIRPORT DIAGRAM

10210

MUSKEGON, MICHIGAN
MUSKEGON COUNTY (MKG)

MUSKEGON CO (MKG) 4 S UTC-5(-4DT) N43°10.13' W86°14.26'

629 B S4 FUEL 100LL, JET A OX 2 Class I, ARFF Index A NOTAM FILE MKG

RWY 06-24: H6501X150 (ASPH-PFC) S-100, D-160, 2S-175, 2D-300 HIRL

RWY 06: REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

RWY 24: MALSR. VASI(V4L)—GA 3.0° TCH 51'. Tree.

RWY 14-32: H6100X150 (ASPH-PFC) S-80, D-120, 2S-165, 2D-210 HIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 32: MALSR. Tree.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 06: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 24: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 1100-0200Z†, other hrs call

231-798-2126. Rwy 14-32 CLOSED between 0400Z† and 1100Z† daily. Deer and birds on and invof of arpt. 24 hr PPR for unscheduled air carrier ops with more than 30 passenger seats between 0400-1100Z†, call airport manager 231-798-4596.

After hours 231-798-1329. VASI Rwy 06, Rwy 24, PAPI Rwy 14 opr continuously. When twr clsd, ACTIVATE HIRL Rwy 06-24 and Rwy 14-32, REIL Rwy 06 and Rwy 14, MALSR Rwy 24 and Rwy 32—CTAF. Ldg fee.

WEATHER DATA SOURCES: ASOS (231) 798-1317. HIWAS 115.2 MKG.

COMMUNICATIONS: CTAF 126.25 ATIS 124.3 UNICOM 122.95

RCO 122.5 (LANSING RADIO)

Ⓡ APP/DEP CON 118.2 North of V-2. 119.8 South of V-2.

Ⓡ CHICAGO CENTER APP/DEP CON 132.27 (0400-1100Z†)

TOWER 126.25 (1100-0400Z†) GND CON 121.6

AIRSPACE: CLASS D svc 1100-0400Z† other times CLASS E.

TRSA svc etc APP CON within 20 NM.

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

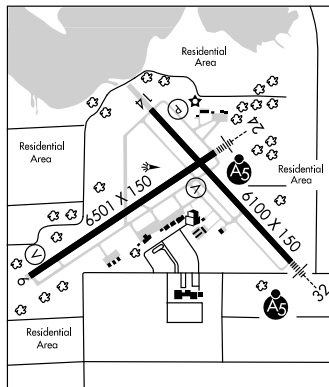
(L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 271° 8.7 NM to fld. 659/1W. HIWAS.

MUSKO NDB (LOM) 219 MK N43°07.27' W86°10.12' 316° 4.2 NM to fld. Unmonitored. LOM unusable byd 10 NM.

ILS 109.9 I-MKG Rwy 32. Class IE. LOM MUSKO NDB. LOM unusable byd 10 NM. LOC BC unusable byd 12° left of course byd 20° right of course. Unmonitored when twr clsd.

ILS/DME 109.5 I-CJH Chan 32 Rwy 24. Class IB. LOC only. Unmonitored when twr clsd.

ASR (1100-0400Z†)



MUSKO N43°07.27' W86°10.12' NOTAM FILE MKG.

NDB (LOM) 219 MK 316° 4.2 NM to Muskegon Co. Unmonitored. Unusable byd 10 NM.

CHICAGO

L-281

NAPOLEON

NAPOLEON (3NP) 1 NW UTC-5(-4DT) N42°10.25' W84°15.58'

DETROIT

963 S2 NOTAM FILE LAN

RWY 09-27: 2740X200 (TURF)

RWY 09: Thld dspld 1200'. Road.

RWY 27: Trees.

RWY 15-33: 2500X160 (TURF)

RWY 15: Thld dspld 290'. Road.

RWY 33: Thld dspld 550'. Trees.

AIRPORT REMARKS: Attended irregularly. Oil tanks S of arpt. Ultralight ops in grass W of Rwy 15-33. Rwy 33 +11' parked vehicles at the thld and buildings 150' distance. Rwy 09-27 and Rwy 15-33 marked with 3' yellow cones; dspld thlds marked with three 3' yellow cones each side of rwy.

COMMUNICATIONS: CTAF 122.9

VAN WAGNEN (6H4) 5W UTC-5(-4DT) N42°09.39' W84°20.06'

DETROIT

980 NOTAM FILE LAN

RWY 09-27: 2105X55 (TURF) LIRL

RWY 09: Trees. RWY 27: P-line.

AIRPORT REMARKS: Attended continuously. Rwy 09-27 marked with yellow tires.

COMMUNICATIONS: CTAF 122.9

NARTRON FLD (See REED CITY)

LOC I-MKG 109.9	APP CRS 321°	Rwy Idg 6100 TDZE 629 Apt Elev 629
---------------------------	------------------------	---

ILS or LOC RWY 32
MUSKEGON COUNTY (MKG)

T *RVR 1800 authorized with the use of FD or AP or HUD to DA.
A When local altimeter setting not received, use Fremont altimeter setting
 ASR and increase DA 65 feet, and all MDA 80 feet, increase S-LOC Cat C
 visibility to RVR 4000, Cat D visibility to RVR 5000.

MALSR

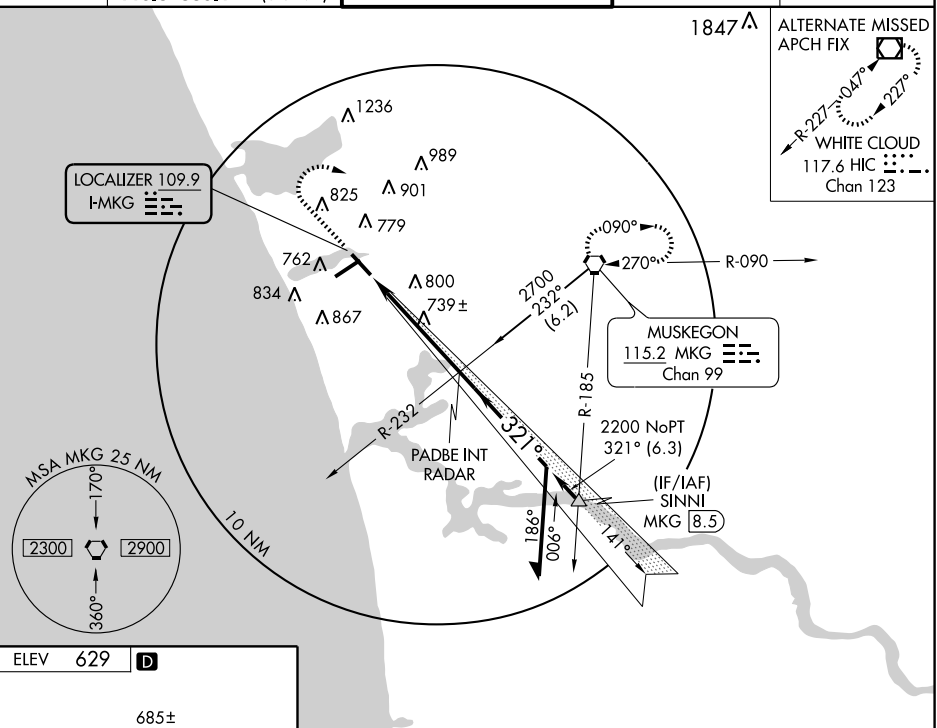
 

MISSED APPROACH: Climb to 2500 then right turn direct MKG VORTAC and hold.

ATIS	MUSKEGON APP CON ★
124.3	118.2 339.1 (N of V2)
	119.8 339.1 (S of V2)

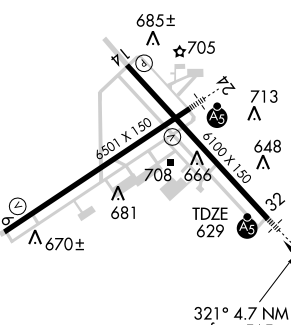
MUSKEGON TOWER ★
126.25 (CTAF) 363.1

GND CON
121.6

UNICOM
122.95

ELEV	629	D
------	-----	---

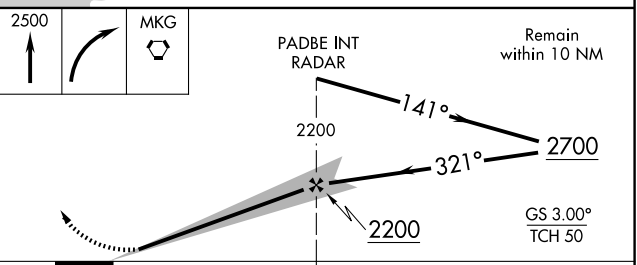
D



REIL Rwy 6 and 14 **L**
HIRL Rwy 6-24 and 14-32 **L**

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



CATEGORY	4.7 NM			
	A	B	C	D
S-LS 32	*829/24 200 (200-½)			
S-LOC 32	1000/24 371 (400-½)			1000/40 371 (400-¾)
CIRCLING	1080-1 451 (500-1)		1140-1½ 511 (600-1½)	1180-2 551 (600-2)

MUSKEGON, MICHIGAN
Amdt 18A 03JUN10

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)
 || S or LOC RWY 32

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

LOC/DME I-CJH 109.5 Chan 32	APP CRS 240°	Rwy Idg TDZE Apt Elev 6501 627 628
---	------------------------	--

ILS RWY 24
MUSKEGON COUNTY (MKG)



MISSED APPROACH: Climb to 2500 then left turn direct MKG VORTAC and hold.

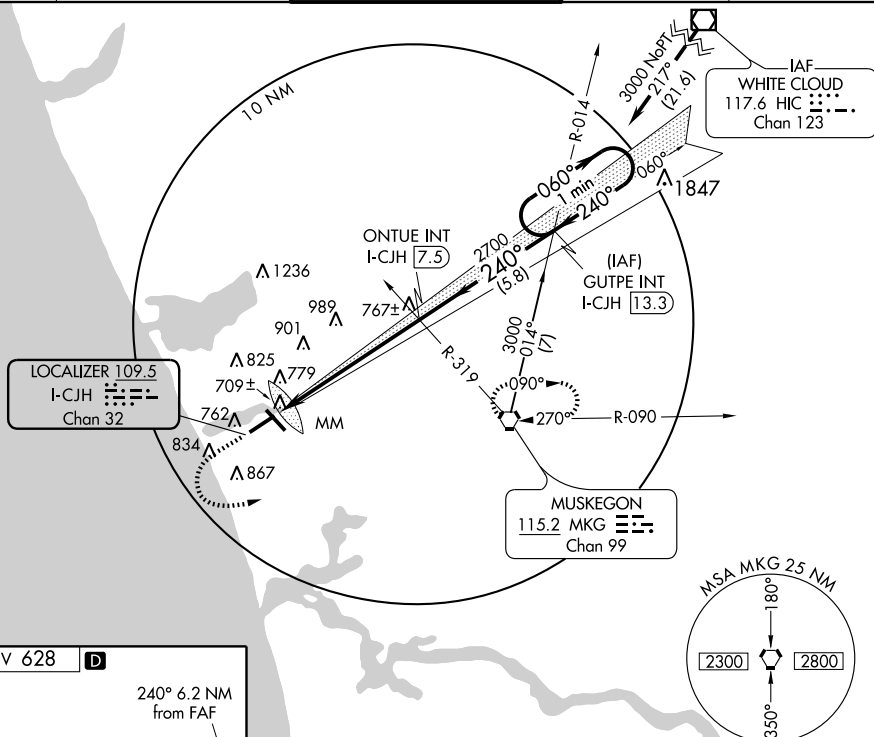
ATIS
124.3

MUSKEGON APP CON ★
118.2 339.1 (N of V2)
119.8 339.1 (S of V2)

MUSKEGON TOWER ★
126.25 (CTAF) **0 363.1**

GND CON
121.6

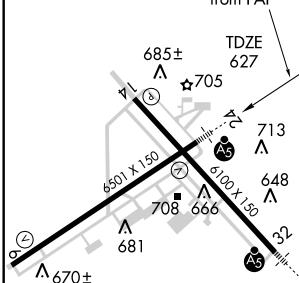
UNICOM
122.95



ELEV 628

D

240° 6.2 NM
from FAF



REIL Rwy 6 and 14
HIRL Rwy 6-24 and 14-32

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

MUSKEGON, MICHIGAN

Amdt 4 10098

2500		MKG		One Minute Holding Pattern	
2700		GUTPE INT I-CJH [13.3]		060° → 3000	
2700		ONTUE INT I-CJH [7.5]		← 240°	
2700		I-CJH [1.3]		GS 3.00°	
0.4		5.8 NM		TCH 56	
CATEGORY		A		B	
S-ILS 24		827-½ 200 (200-½)		C	
S-LOC 24		980-½ 353 (400-½)		D	
CIRCLING		1080-1 452 (500-1)		1140-1½ 512 (600-1½)	
				1180-2 552 (600-2)	

MUSKEGON COUNTY (MKG)

ILS RWY 24

43°10'N - 86°14'W

LOC I-MKG 109.9	APP CRS 141°	Rwy Idg TDZE 6100 Apt Elev 629
---------------------------	------------------------	--

LOC BC RWY 14

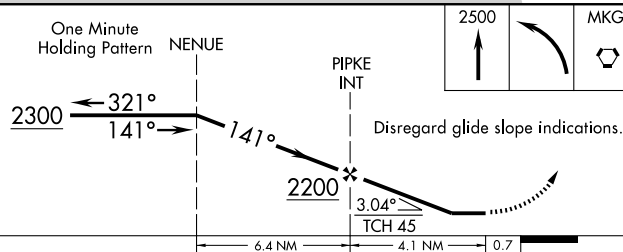
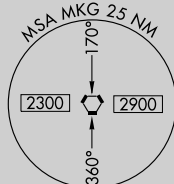
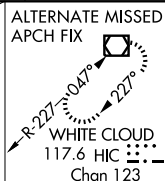
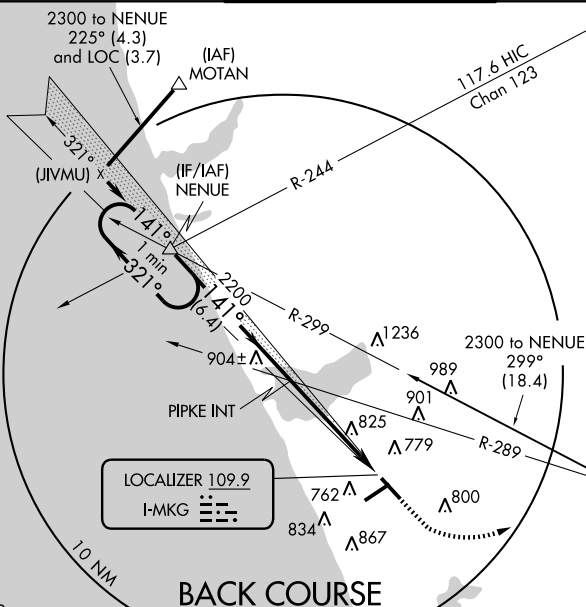
MUSKEGON COUNTY (MKG)

V Visibility reduction by helicopters NA. When local altimeter setting not received, use Fremont altimeter setting and increase all MDA 80 feet.

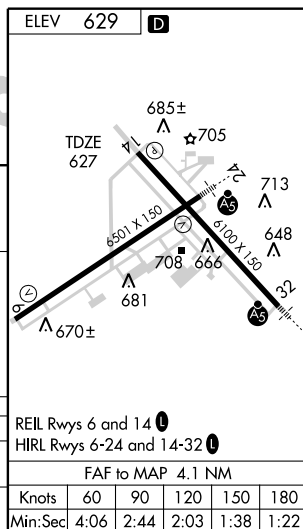
A ASR

MISSED APPROACH: Climb to 2500 then left turn direct MKG VORTAC and hold.

ATIS 124.3	MUSKEGON APP CON ★ 118.2 339.1 (N of V2) 119.8 339.1 (S of V2)	MUSKEGON TOWER ★ 126.25 (CTAF) 0 363.1	GND CON 121.6	UNICOM 122.95
----------------------	--	---	-------------------------	-------------------------



CATEGORY	A	B	C	D
S-14	1140-1 513 (600-1)		1140-1½ 513 (600-1½)	1140-1¾ 513 (600-1¾)
CIRCLING	1140-1 511 (600-1)		1140-1½ 511 (600-1½)	1180-2 551 (600-2)



APP CRS	Rwy Idg	6501
060°	TDZE	623
	Apt Elev	628

RNAV (GPS) RWY 6

MUSKEGON COUNTY (MKG)

NA
ASR

IAF ARM APPROACH MODE PRIOR TO IAF.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500 via 060° course to ONPIE
WP and right turn via 102° track to MKG VORTAC and hold.

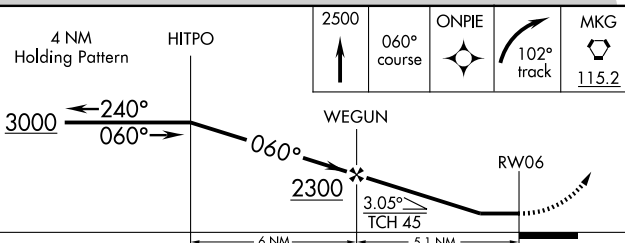
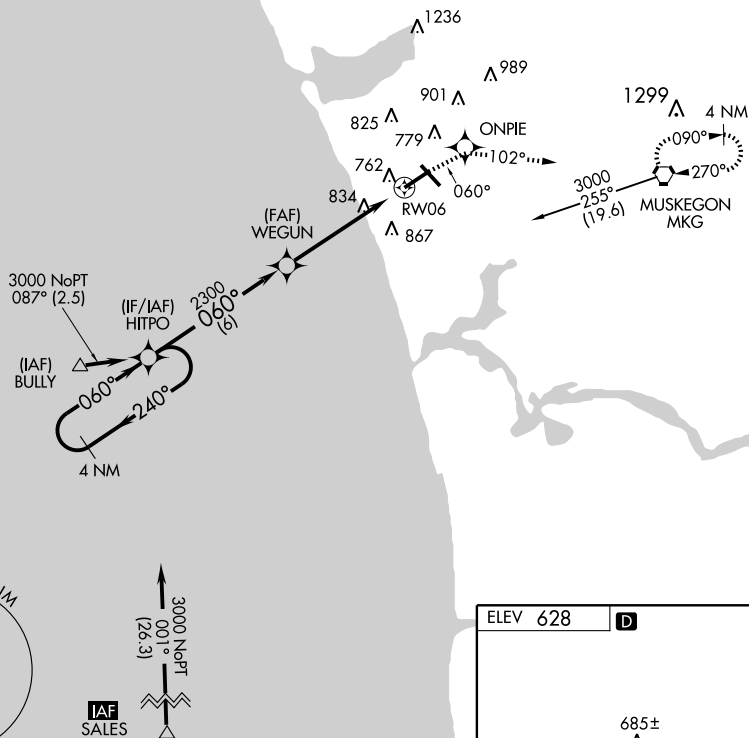
ATIS
124.3

MUSKEGON APP CON ★
118.2 339.1 (N of V2)
119.8 339.1 (S of V2)

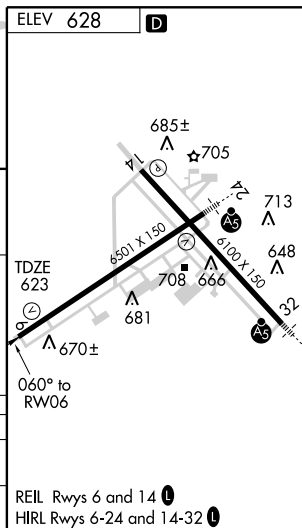
MUSKEGON TOWER ★
126.25 (CTAF) 0 363.1

GND CON
121.6

UNICOM
122.95



CATEGORY	A	B	C	D
LNAV MDA	1100-1 477 (500-1)	1100-1½ 477 (500-1½)	1100-1½ 477 (500-1½)	1100-1½ 477 (500-1½)
CIRCLING	1100-1 472 (500-1)	1140-1½ 512 (600-1½)	1180-2 552 (600-2)	1180-2 552 (600-2)



WAAS CH 69410 W14A	APP CRS 141°	Rwy ldg TDZE Apt Elev	6100 627 629
--	------------------------	-----------------------------	---

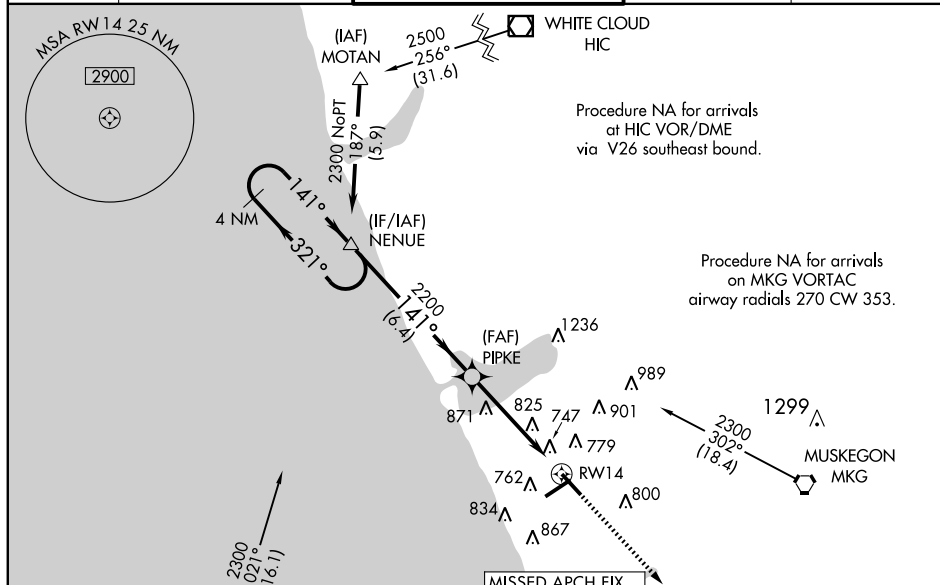
RNAV (GPS) RWY 14

MUSKEGON COUNTY (MKG)

⚠ Baro-VNAV NA when using Fremont altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
⚠ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet and all MDA 80 feet, increase LPV all Cats, LNAV/VNAV all Cats, LNAV Cats C and D, and Circling Cat C visibility ¼ mile. VDP NA when using Fremont altimeter setting.

MISSED APPROACH:
Climb to 2700 direct
SINNI and hold.

ATIS 124.3	MUSKEGON APP CON ★ 118.2 339.1 (N of V2) 119.8 339.1 (S of V2)	MUSKEGON TOWER ★ 126.25 (CTAF) 0 363.1	GND CON 121.6	UNICOM 122.95
----------------------	--	---	-------------------------	-------------------------



<p>4 NM Holding Pattern</p> <p>2300 ← 321° / 141° →</p> <p>GS 3.00° TCH 45</p> <p>NENUE</p> <p>PIPKE</p> <p>2200</p> <p>* 1.6 NM to RWY14</p> <p>* LNAV only</p> <p>2700 SINNI</p> <p>4 NM</p> <p>142°</p> <p>322°</p> <p>SINNI</p> <p>ELEV 629 D</p> <p>141° to RWY14</p> <p>TDZE 627</p> <p>685±</p> <p>705</p> <p>713</p> <p>648</p> <p>708</p> <p>666</p> <p>681</p> <p>670±</p> <p>6501 X 150</p> <p>6001 X 150</p> <p>REIL Rwy 6 and 14 1</p> <p>HRL Rwy 6-24 and 14-32 1</p>				
CATEGORY	A	B	C	D
LPV DA	877-3/4 250 (300-3/4)			
LNAV/VNAV DA	1079-1 1/2 452 (500-1 1/2)			
LNAV MDA	1180-1	553 (600-1)	1180-1 1/2 553 (600-1 1/2)	1180-1 3/4 553 (600-1 3/4)
CIRCLING	1180-1	551 (600-1)	1180-1 1/2 551 (600-1 1/2)	1180-2 551 (600-2)

MUSKEGON, MICHIGAN

Amdt 1 10098

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

RNAV (GPS) RWY 14

RNAV (GPS) RWY 24

MUSKEGON COUNTY (MKG)

APP CRS **240°**
Rwy Idg **6501**
TDZE **627**
Apt Elev **628**

NA BARO-VNAV NA below -16°C (4°F).
DME/DME RNP -0.3 NA.
ASR

MALSR



MISSED APPROACH: Climb to 3000
via 240° course to HITPO WP and hold.

ATIS
124.3

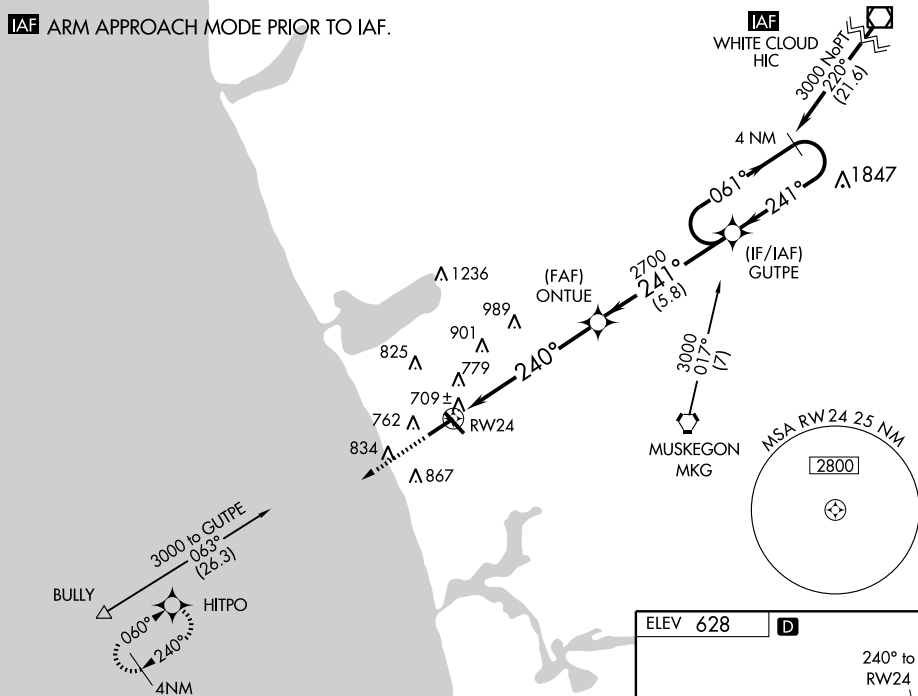
MUSKEGON APP CON ★
118.2 339.1 (N of V2)
119.8 339.1 (S of V2)

MUSKEGON TOWER ★
126.25 (CTAF) **363.1**

GND CON
121.6

UNICOM
122.95

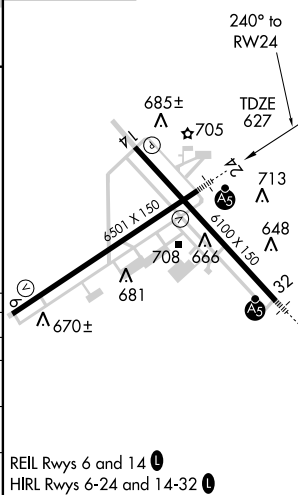
IAF ARM APPROACH MODE PRIOR TO IAF.



3000	240° course	HITPO				
CATEGORY	A	B	C	D		
GLS PA DA	NA					
LNAV/ VNAV DA	1080-1 453 (500-1)					
LNAV MDA	1100-½ 473 (500-½)		1100-¾ 473 (500-¾)		1100-1 473 (500-1)	
CIRCLING	1100-1½ 472 (500-½)		1140-1½ 512 (600-½)		1180-2 552 (600-2)	

ELEV 628

D



MUSKEGON, MICHIGAN

Orig-A 10098

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

RNAV (GPS) RWY 24

REIL Rwy 6 and 14 **1**
HIRL Rwy 6-24 and 14-32 **1**

WAAS CH 63010 W32A	APP CRS 321°	Rwy Idg TDZE Apt Elev	6100 629 629
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 32

MUSKEGON COUNTY (MKG)

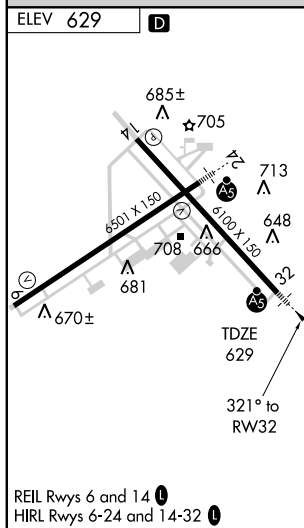
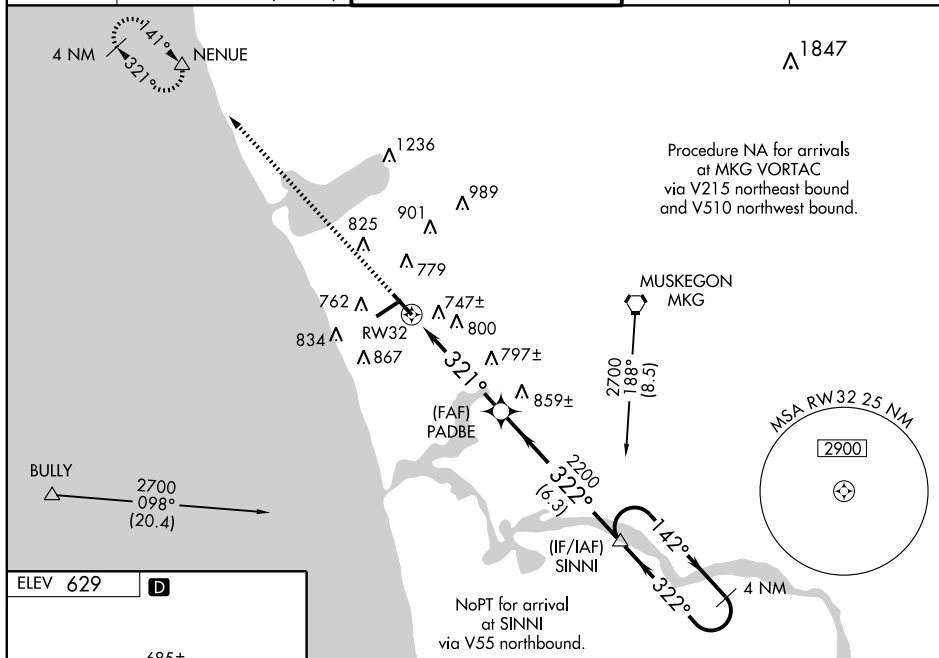
▼ For inoperative MALS, increase LPV all Cats visibility to RVR 5000. Baro-VNAV NA when using Fremont altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet, all MDA 80 feet, increase LPV all Cats visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 6000, LNAV Cat C visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. VDP NA when using Fremont altimeter setting.

MALS



MISSED APPROACH:
Climb to 2300 direct
NENUE and hold.

ATIS 124.3	MUSKEGON APP CON ★ 118.2 339.1 (N of V2) 119.8 339.1 (S of V2)	MUSKEGON TOWER ★ 126.25 (CTAF) 363.1	GND CON 121.6	UNICOM 122.95
----------------------	--	--	-------------------------	-------------------------



2300

NENUE

△

*LNAV only

RW32

*1.3 NM to RW32

1.3 NM

3.4 NM

6.3 NM

PADBE

2200

321°

322°

2200

SINNI

142° →

← 322°

2700

4 NM Holding Pattern

GS 3.00° TCH 50

CATEGORY	A	B	C	D
LPV DA	913/24		284 (300-½)	
LNAV/VNAV DA	1029/50 400 (400-1)			
LNAV MDA	1100/24	471 (500-½)	1100/40 471 (500-¾)	1100/50 471 (500-1)
CIRCLING	1100-1	471 (500-1)	1140-1½ 511 (600-1½)	1180-2 551 (600-2)

MUSKEGON, MICHIGAN

Amdt 1 10098

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

RNAV (GPS) RWY 32

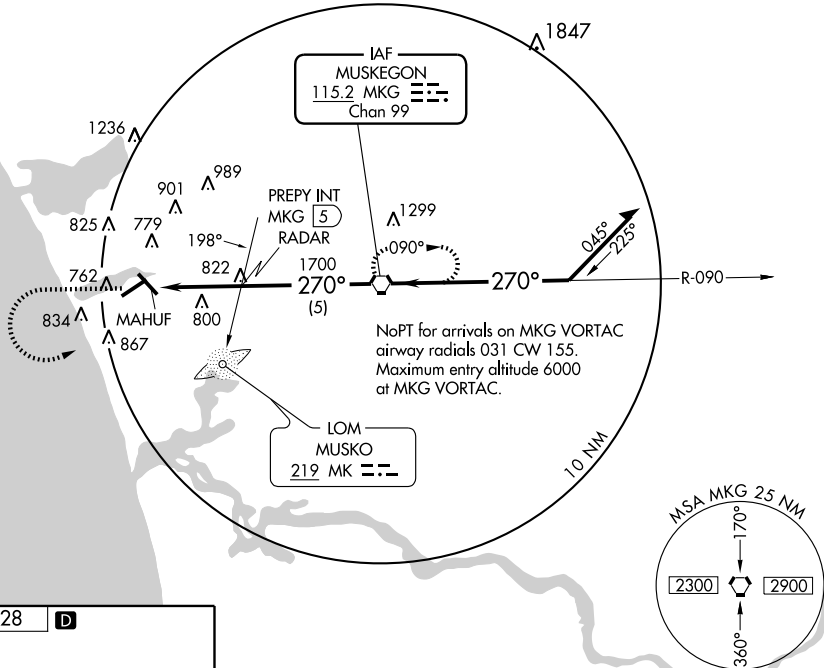
VORTAC MKG 115.2 Chan 99	APP CRS 270°	Rwy Idg TDZE Apt Elev N/A N/A 628
--	------------------------	---

VOR-A
MUSKEGON COUNTY (MKG)

ADF, DME or RADAR REQUIRED.
If local altimeter setting not received, use Tulip City
altimeter setting and increase all MDAs 80 feet.

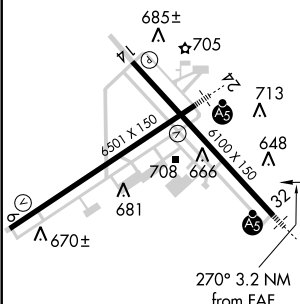
MISSED APPROACH: Climb to 2500 then
left turn direct MKG VORTAC and hold.

ATIS 124.3	MUSKEGON APP CON ★ 118.2 339.1 (N of V2) 119.8 339.1 (S of V2)	MUSKEGON TOWER ★ 126.25 (CTAF) 0 363.1	GND CON 121.6	UNICOM 122.95
----------------------	--	---	-------------------------	-------------------------



ELEV 628

D

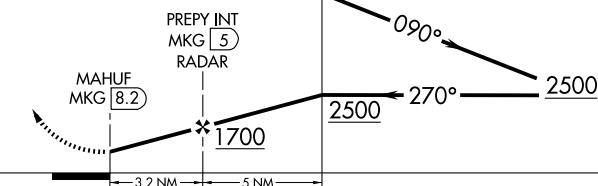
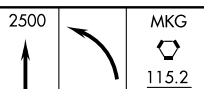


REIL Rwy 6 and 14

HIRL Rwy 6-24 and 14-32

FAF to MAP 3.2 NM

Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04



CATEGORY	A	B	C	D
CIRCLING	1100-1	472 (500-1)	1180-1½ 552 (600-1½)	1220-2 592 (600-2)

MUSKEGON, MICHIGAN

Amdt 20 10098

MUSKEGON COUNTY (MKG)

43°10'N - 86°14'W

VOR-A

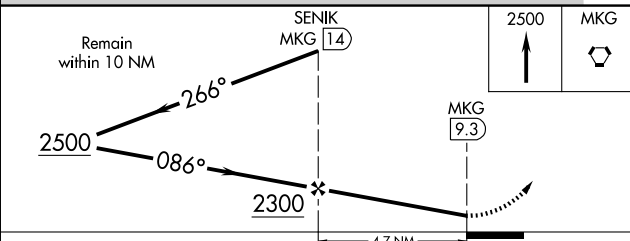
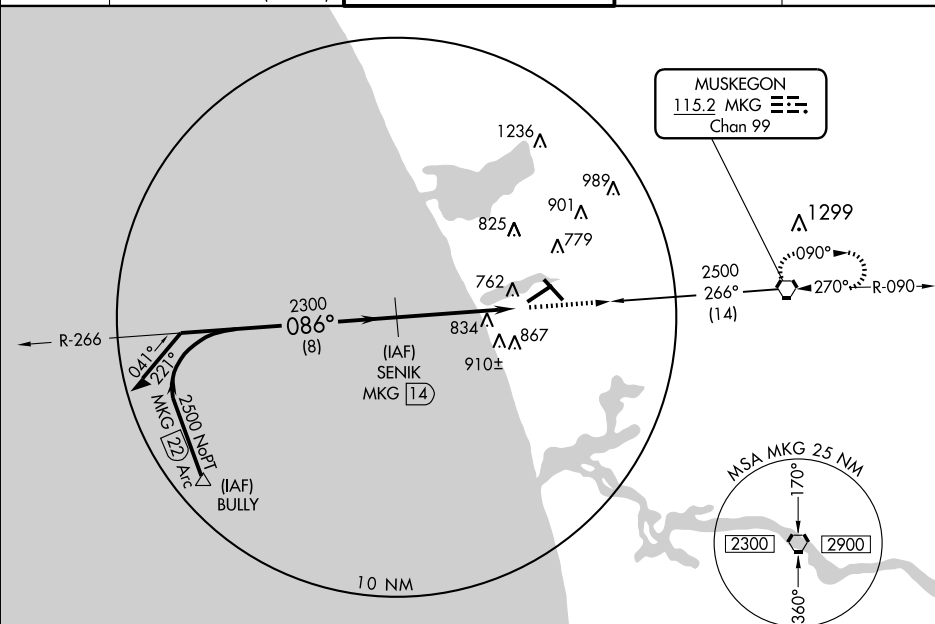
VORTAC MKG	APP CRS	Rwy Idg	6501
115.2	086°	TDZE	623
Chan 99		Apt Elev	629

VOR/DME RWY 6
MUSKEGON COUNTY (MKG)

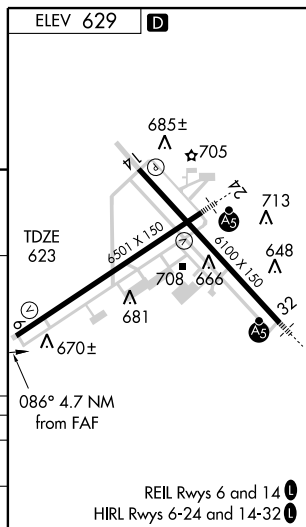
ASR When local altimeter setting not received, use Fremont
altimeter setting and increase all MDA 80 feet; increase
S-6 Cats C/D visibility and circling CAT C visibility ¼ mile.

MISSED APPROACH: Climb to 2500 direct MKG
VORTAC and hold.

ATIS 124.3	MUSKEGON APP CON ★ 118.2 339.1 (N of V2) 119.8 339.1 (S of V2)	MUSKEGON TOWER ★ 126.25 (CTAF) 363.1	GND CON 121.6	UNICOM 122.95
----------------------	--	---	-------------------------	-------------------------



CATEGORY	A	B	C	D
S-6	1160-1 537 (600-1)		1160-1½ 537 (600-1½)	1160-1¾ 537 (600-1¾)
CIRCLING	1160-1 531 (600-1)		1160-1½ 531 (600-1½)	1220-2 591 (600-2)





NOTE: DME Required.
NOTE: Chart not to scale.

DETROIT, MICHIGAN

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

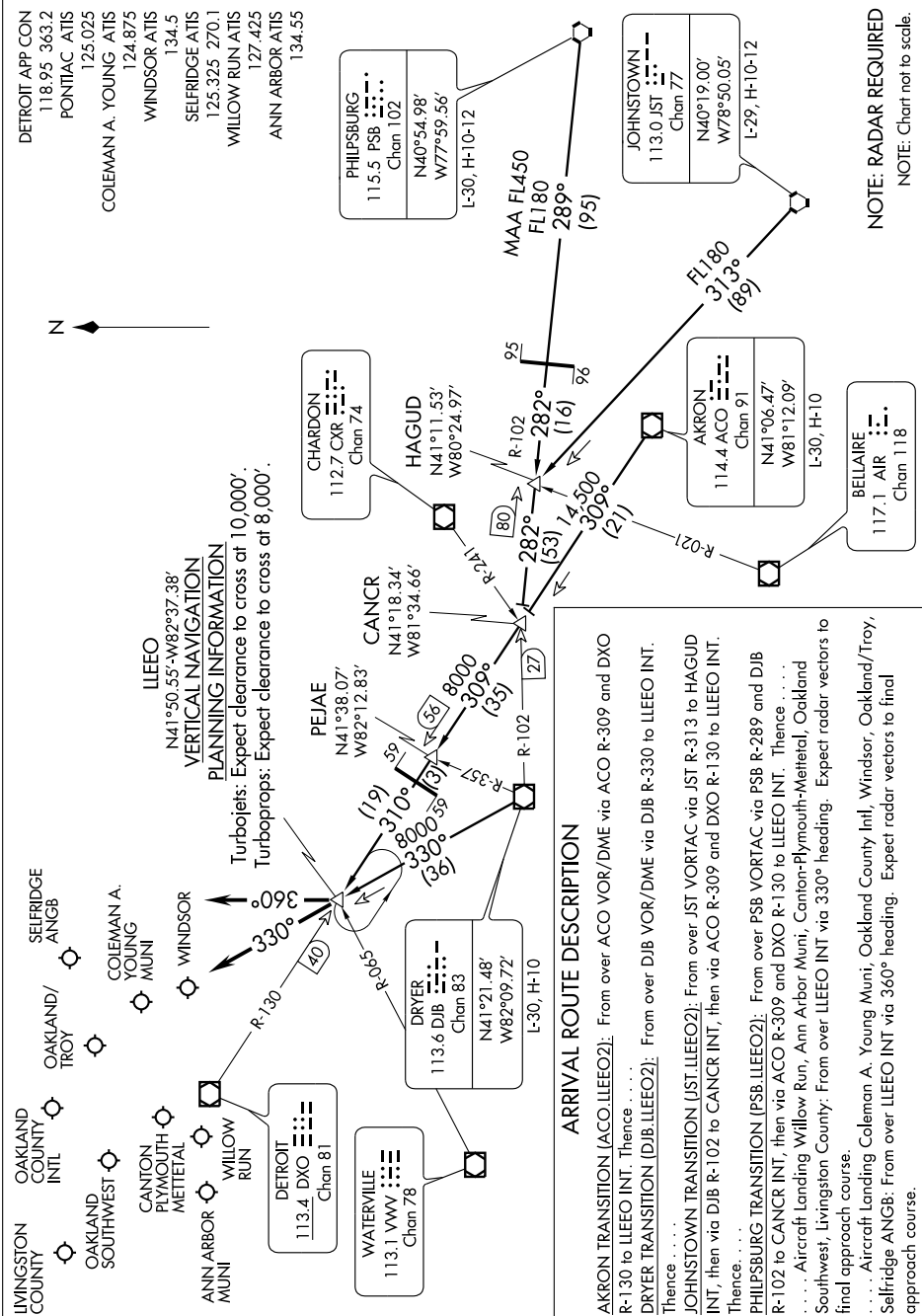
. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

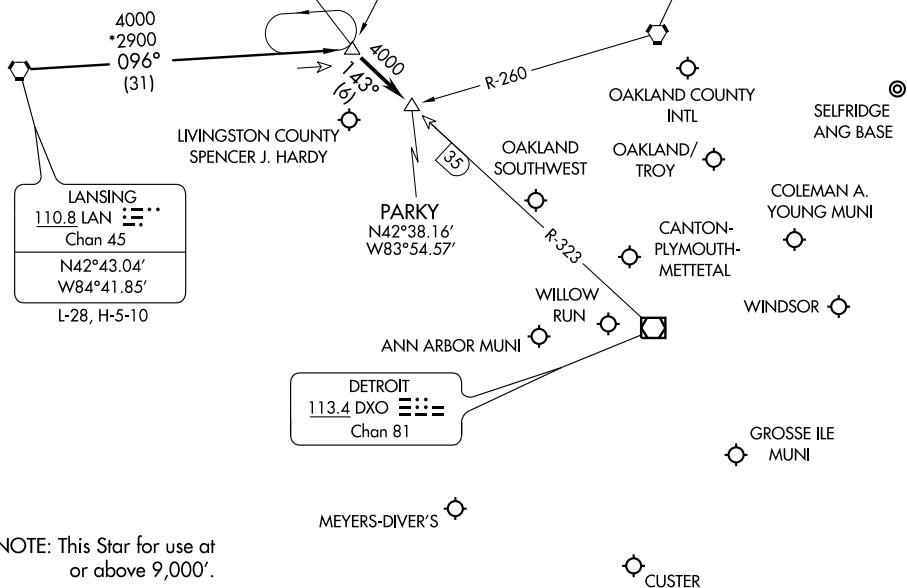
SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION

PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at
9000'.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . .

. . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . .

. . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

SWWAN ONE ARRIVAL

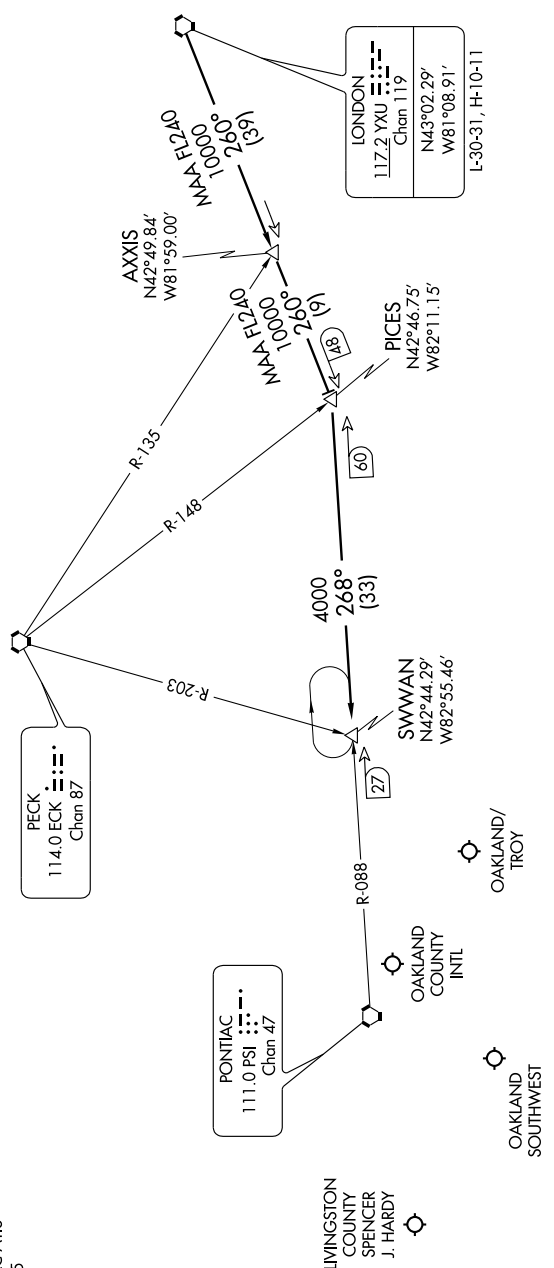
DETROIT APP CON
127.5 363.2
PONTIAC ATIS
125.025

SWWAN ONE ARRIVAL

(SWWAN.SWWAN1) 10042

ST-5052 (FAA)

PONTIAC, MICHIGAN



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.
NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

PONTIAC, MICHIGAN

VORTAC SVM 114.3 Chan 90	APP CRS 350°	Rwy Idg TDZE Apt Elev 926	N/A N/A 926
--	------------------------	---	--------------------------

VOR or GPS-A

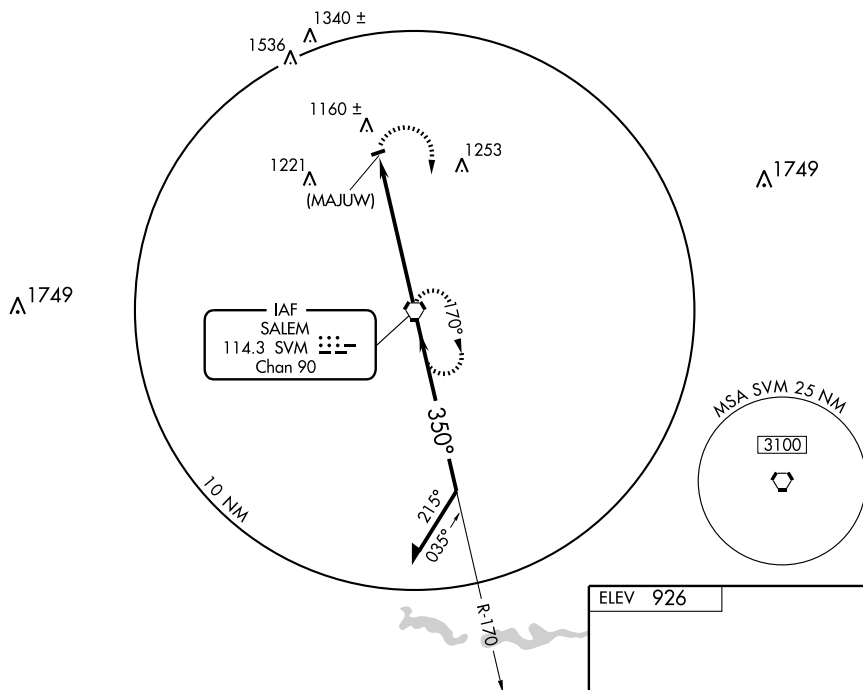
NEW HUDSON / OAKLAND SOUTHWEST (Y47)

▼ Use Detroit Willow Run airport altimeter setting.
 ▲ NA Night visibility minimums 2 miles.
 When VGSI inop, Circling to Rwy 8 NA at night.

MISSED APPROACH: Climbing right turn
to 3000 direct SVM VORTAC and hold.

DETROIT APP CON
127.5 363.2

UNICOM
122.7 (CTAF) **0***



3000
SVM
114.3

VORTAC

Remain
within 10 NM

(MAJUW)
SVM
5.7

2700

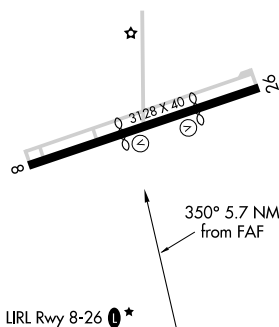
170°

350°

2700

CATEGORY	A	B	C	D
CIRCLING	1520-1	594 (600-1)	NA	NA

ELEV 926

LIRL Rwy 8-26 **0***

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

NEWBERRY N46°18.75' W85°27.81' NOTAM FILE ERY.

(T) VORW/DME 108.2 ERY Chan 19 at Luce Co. 869/6W. AWOS-3.

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored Sat-Sun.

RCO 122.4 (GREEN BAY RADIO)

GREEN BAY

L-31B

NEWBERRY

LUCE CO (ERY) 3 SE UTC-5(-4DT) N46°18.66' W85°27.43'

869 B FUEL 100LL NOTAM FILE ERY

RWY 11-29: H4304X75 (ASPH) S-8 MIRL 0.5% up W

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 25. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees.

RWY 04-22: 2856X150 (TURF)

RWY 04: Thld dspcd 936'. Trees.

RWY 22: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1330-2100Z†. For svcs other times call 906-293-3703. Rwy 04-22 CLOSED Nov-Mar and when snow covered. Rwy 04-22 marked with 3' yellow cones. ACTIVATE MIRL Rwy 11-29; REIL Rwy 11 and Rwy 29; PAPI Rwy 11 and Rwy 29 and windcone—CTAF.

WEATHER DATA SOURCES: AWOS-3 108.2 ERY (906) 293-2979.

COMMUNICATIONS: CTAF/UNICOM 122.8

NEWBERRY RCO 122.4 (GREEN BAY RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE ERY.

NEWBERRY (T) VORW/DME 108.2 ERY Chan 19 N46°18.75'

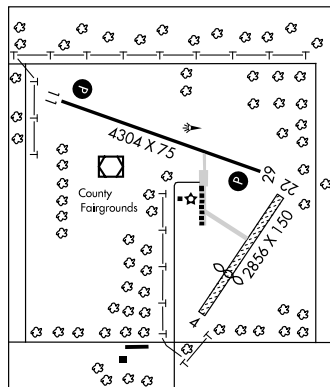
W85°27.81' at fld. 869/6W. AWOS-3.

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored Sat-Sun.

GREEN BAY

L-31B

IAP



NEW HUDSON

OAKLAND SOUTHWEST (Y47) 1 SW UTC-5(-4DT) N42°30.19' W83°37.42'

926 B S4 FUEL 100LL NOTAM FILE LAN

RWY 08-26: H3128X40 (ASPH) LIRL

RWY 08: VASI(V2R)—GA 3.0°. Thld dspcd 1266'. Brush.

RWY 26: VASI(V2L)—GA 3.0°. Thld dspcd 864'. Trees.

AIRPORT REMARKS: Attended 1330Z†—dusk. Occasional 4"-6" drop off on rwy and twy shoulders. Trees and brush in primary surface 70'-120' left and right. ACTIVATE LIRL Rwy 08-26 CTAF 5 times.

COMMUNICATIONS: CTAF/UNICOM 122.7

® DETROIT APP/DEP CON 127.5

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

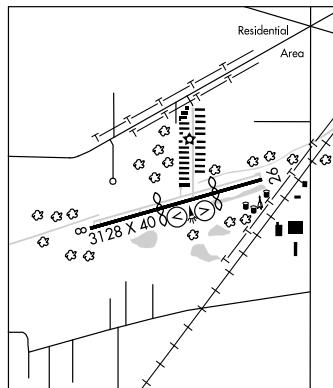
W83°35.65' 350° 5.8 NM to fld. 950/3W.

DETROIT

COPTER

L-28J, A

IAP



APP CRS **116°**
Rwy Idg **4304**
TDZE **869**
Apt Elev **869**

RNAV (GPS) RWY 11

NEWBERRY / LUCE COUNTY (ERY)

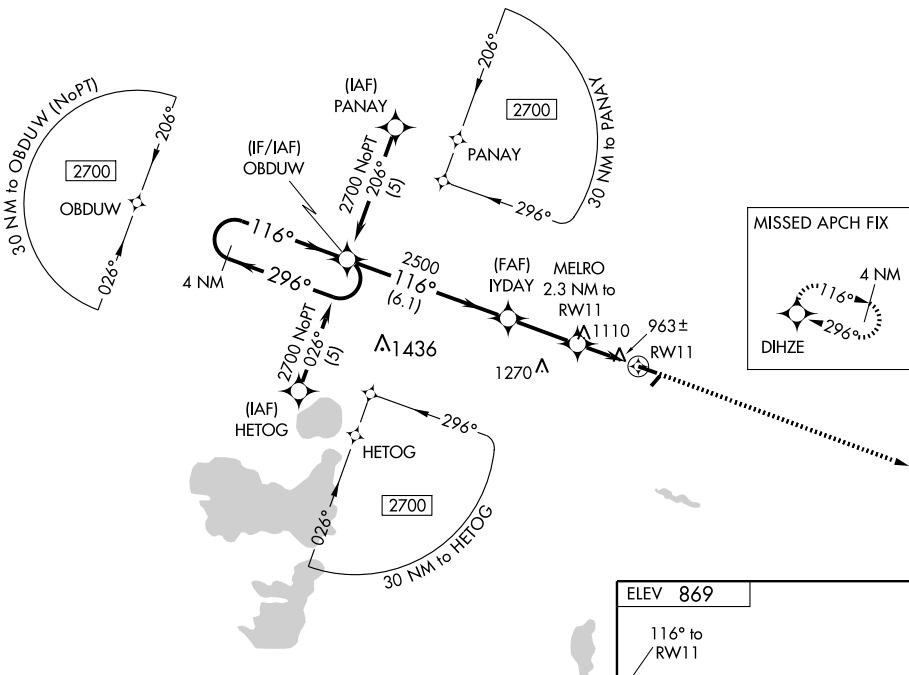
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase DA 105 feet and all MDA 120 feet, increase LNAV/VNAV visibility ¼ mile all Cnts, LNAV Cnts C and D ½ mile, and Circling Cnts C and D ¼ mile. Baro-VNAV NA when using Chippewa Co Intl altimeter setting.

MISSED APPROACH:
Climb to 2700 direct
DIHZE and hold.

AWOS-3
108.2

GREEN BAY RADIO
122.4

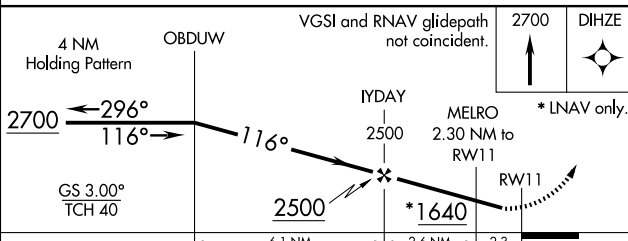
UNICOM
122.8 (CTAF) 0



MISSED APCH FIX

DIHZE

ELEV **869**



CATEGORY	A	B	C	D
LNAV/DA VNAV	1259-1½		390 (400-1½)	
LNAV MDA	1360-1	491 (500-1)	1360-1¼ 491 (500-1¼)	1360-1½ 491 (500-1½)
CIRCLING	1360-1	491 (500-1)	1360-1½ 491 (500-1½)	1420-2 551 (600-2)

MIRL Rwy 11-29 **0**
REIL Rwy 11 and 29 **0**

WAAS CH 40418 W29A	APP CRS 296°	Rwy Idg TDZE Apt Elev	4304 867 869
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 29

NEWBERRY/LUCE COUNTY (ERY)

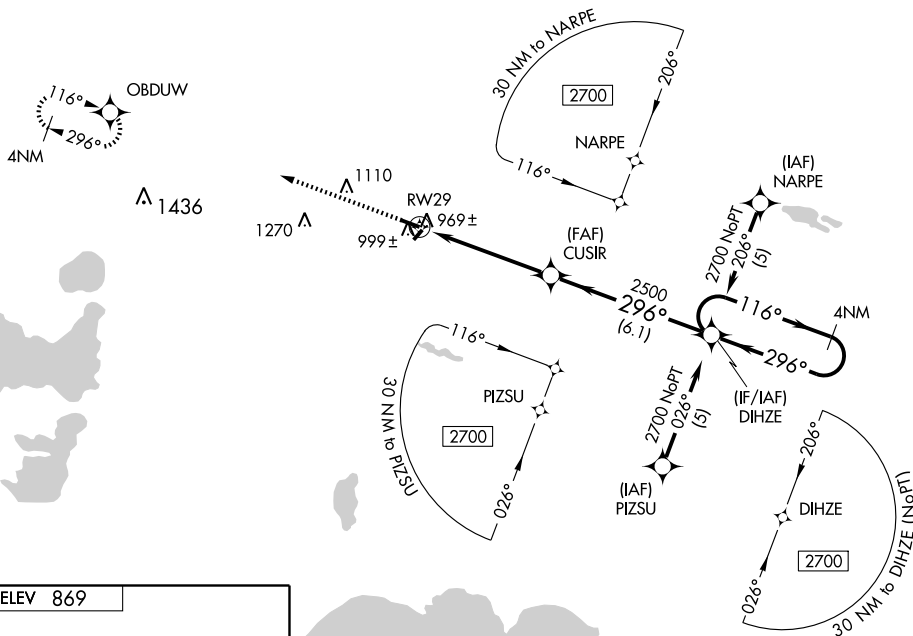
⚠ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LPV and LNAV/VNAV visibility ¼ mile all Cats, LNAV Cats C and D ½ mile, and Circling Cat D ¼ mile. Baro-VNAV NA when using Chippewa Co Intl altimeter setting.

MISSED APPROACH:
Climb to 2700 direct
OBDUW and hold.

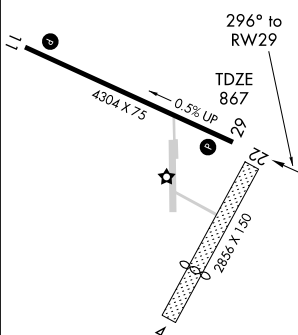
AWOS-3
108.2

GREEN BAY RADIO
122.4

UNICOM
122.8 (CTAF) 0

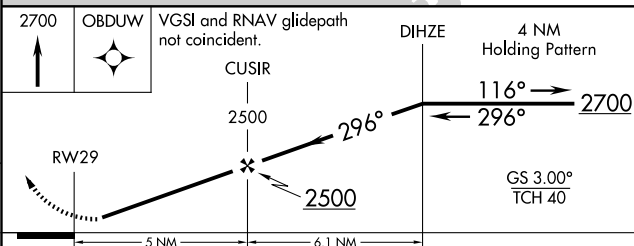


ELEV 869



MIRL Rwy 11-29 **0**
REIL Rws 11 and 29 **0**

NEWBERRY, MICHIGAN
Orig 29JUL10



CATEGORY	A	B	C	D
LPV DA	1117-1 250 (300-1)			
LNAV/VNAV DA	1239-1½ 372 (400-1½)			
LNAV MDA	1260-1 393 (400-1)			1260-1¼ 393 (400-1¼)
CIRCLING	1300-1 431 (500-1)	1320-1 451 (500-1)	1320-1½ 451 (500-1½)	1420-2 551 (600-2)

46°19'N - 85°27'W

NEWBERRY/LUCE COUNTY (ERY)
RNAV (GPS) RWY 29

VOR/DME ERY
108.2
Chan **19**

APP CRS
126°

Rwy Idg **4304**
TDZE **869**
Apt Elev **869**

VOR RWY 11

NEWBERRY/LUCE COUNTY (ERY)



NA

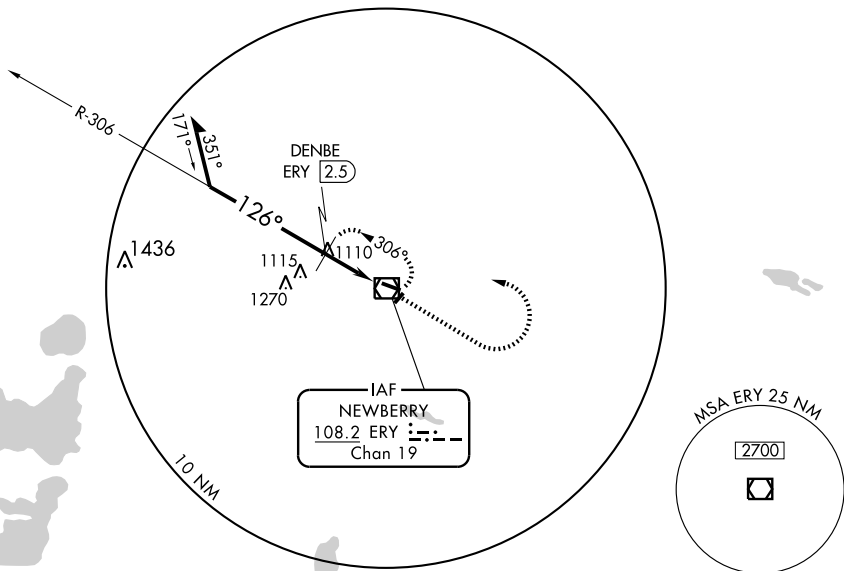
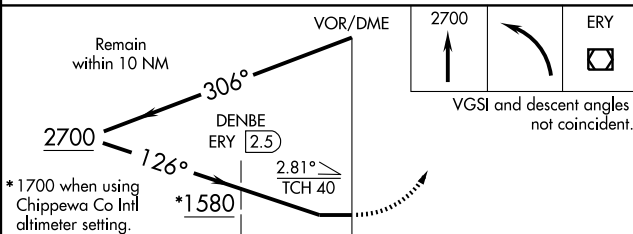
Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all MDA 120 feet, increase S-11 and Circling Cat B visibility ¼ mile, Cat C and D ½ mile, DENBE FIX minimums; Increase S-11 Cat C and D visibility ½ mile, Circling Cat C and D ¼ mile.

MISSED APPROACH:
Climb to 2700 then left
turn direct ERY VOR/DME
and hold.

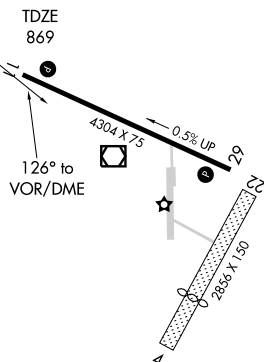
AWOS-3
108.2

GREEN BAY RADIO
122.4

UNICOM
122.8 (CTAF) 0

ELEV **869**

CATEGORY	A	B	C	D
S-11	1580-1	711 (800-1)	1580-2 711 (800-2)	1580-2¼ 711 (800-2¼)
CIRCLING	1580-1	711 (800-1)	1580-2 711 (800-2)	1580-2¼ 711 (800-2¼)
DENBE FIX MINIMUMS				
S-11	1360-1	491 (500-1)	1360-1¼ 491 (500-1¼)	1360-1½ 491 (500-1½)
CIRCLING	1360-1	491 (500-1)	1360-1½ 491 (500-1½)	1420-2 551 (600-2)



MIRL Rwy 11-29 0
REIL Rws 11 and 29 0

VOR/DME ERY 108.2 Chan 19	APP CRS 289°	Rwy Idg TDZE Apt Elev	4304 867 869
---	------------------------	-----------------------------	---

VOR RWY 29

NEWBERRY/LUCE COUNTY (ERY)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all MDA 120 feet, increase S-29 Cat C and D visibility ¼ mile, Circling Cat C and D ¼ mile, DENKY FIX minimums; Increase S-29 Cat C and D visibility ½ mile and Circling Cat D visibility ¼ mile.

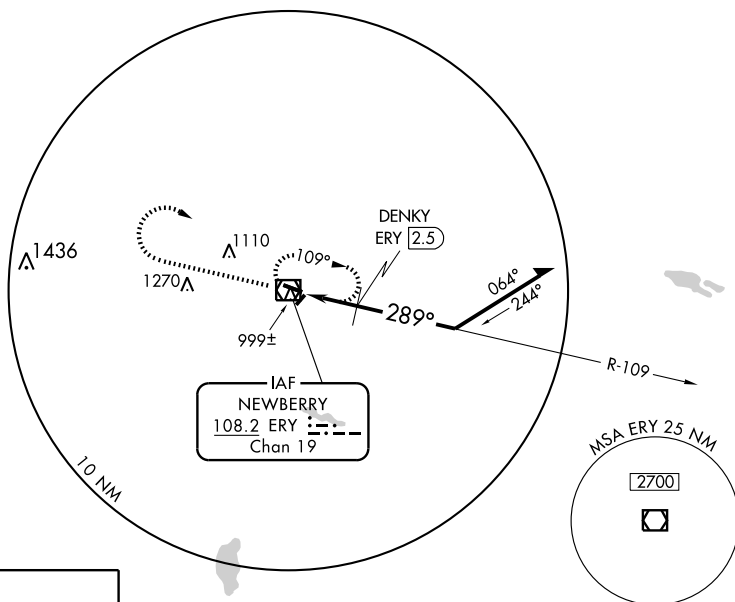
▲ NA

MISSED APPROACH:
Climb to 2500 then right turn direct ERY VOR/DME and hold.

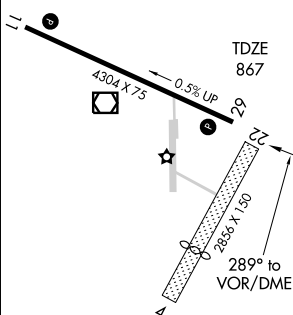
AWOS-3
108.2

GREEN BAY RADIO
122.4

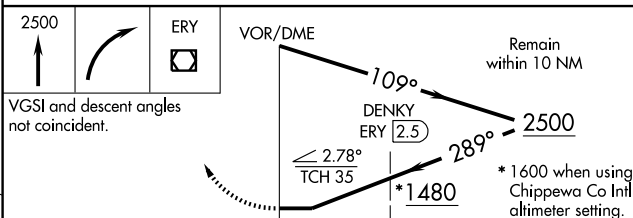
UNICOM
122.8 (CTAF) 0



ELEV 869



MIRL Rwy 11-29 **0**
REIL Rwy 11 and 29 **0**



CATEGORY	A	B	C	D
S-29	1480-1	613 (700-1)	1480-1¾ 613 (700-1¾)	1480-2 613 (700-2)
CIRCLING	1480-1	611 (700-1)	1480-1¾ 611 (700-1¾)	1480-2 611 (700-2)

DENKY FIX MINIMUMS

S-29	1260-1 393 (400-1)			1260-1¼ 393 (400-1¼)
CIRCLING	1300-1 431 (500-1)	1320-1 451 (500-1)	1320-1½ 451 (500-1½)	1420-2 551 (600-2)

NEWBERRY, MICHIGAN
Amdt 12 29JUL10

NEWBERRY/LUCE COUNTY (ERY)

46°19'N - 85°27'W

VOR RWY 29

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

NILES

JERRY TYLER MEMORIAL (3TR) 2 NE UTC-5(-4DT) N41°50.15' W86°13.51'

CHICAGO

750 B S4 FUEL 100LL, JET A TPA—See Remarks. NOTAM FILE LAN

L-281

RWY 15-33: H4100X75 (ASPH) S-25 MIRL

IAP

RWY 15: REIL. Thld dspcd 300'. Road.

RWY 33: REIL. Trees.

RWY 04-22: H3315X50 (ASPH) S-8

RWY 04: Thld dspcd 900'. Road.

RWY 22: Thld dspcd 750'. Trees.

AIRPORT REMARKS: Attended 1400-2200Z. Arpt unattended major holidays. Rwy 04-22 pavement cracked and broken. +51 obstruction lgtd poles, in Rwy 15 transition zone. Trees between Rwy 04 and Rwy 33 and between Rwy 33 and Rwy 22 obstruct view of Rwy ends. Rwy 04 +51' tree, 290' distance, 120' left, apch ratio 2:1. REIL Rwy 15 and Rwy 33 OTS indef. TPA piston acft 1750(1000), turbine acft 2250(1500). ACTIVATE MIRL Rwy 15-33, REILS Rwy 15 and Rwy 33—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

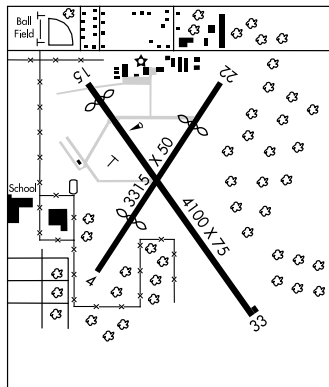
Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

GCO 121.725 (SOUTH BEND CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 046° 5.8 NM to fld. 804/00E. HIWAS



NORTHPORT

WOOLSEY MEMORIAL (5D5) 3 NE UTC-5(-4DT) N45°09.86' W85°34.53'

GREEN BAY

628 NOTAM FILE LAN

RWY 09-27: 3663X120 (TURF) LIRL

RWY 09: Thld dspcd 266'. Road.

RWY 27: Trees.

RWY 16-34: 2670X150 (TURF)

RWY 16: Thld dspcd 800'. Trees.

RWY 34: Thld dspcd 269'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Mar and when snow covered. Birds and deer on and invof arpt. Rwy 09-27 slopes up E to W, and Rwy 16-34 slopes up N to S. Rwy 09-27 and Rwy 16-34 and dspcd thlds marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27—122.9.

COMMUNICATIONS: CTAF 122.9

NUNICA

HAT FIELD (5N7) 2 NW UTC-5(-4DT) N43°05.83' W86°05.68'

CHICAGO

625 S4 NOTAM FILE LAN.

RWY 08-26: 3600X100 (TURF)

RWY 08: Thld dspcd 600'. Trees.

RWY 26: Thld dspcd 1200'. Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Nov thru Mar. Deer and birds on and invof arpt. Rwy 08-26 and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

JABLONSKI (33C) 1 W UTC-5(-4DT) N43°04.94' W86°05.69'

CHICAGO

634 NOTAM FILE LAN

RWY 09-27: 2995X100 (TURF) LIRL

RWY 09: Thld dspcd 998'. Tree.

RWY 27: Thld dspcd 796'. Fence.

AIRPORT REMARKS: Attended irregularly. Deer on and invof rwys. Rwy 09-27 rough with mole hills. For LIRL Rwy 09-27 call arpt manager 616-837-6282. Rwy 09-27 and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

OAKLAND CO INTL (See PONTIAC)

OAKLAND SOUTHWEST (See NEW HUDSON)

OAKLAND TROY (See TROY)

OCEANA CO (See HART/SHELBY)

OJIBWA AIRPARK (See WEIDMAN)

OLSTE N43°27.69' W84°10.79' NOTAM FILE MBS.

DETROIT

NDB (LOM) 257 MB 050° 6.1 NM to MBS Intl. Unmonitored. Unusable byd 10 NM and between 150°-180°.

VORTAC GIJ
115.4
Chan 101

APP CRS
046°

Rwy Idg	2415
TDZE	743
Apt Elev	750

VOR or GPS RWY 4
NILES / JERRY TYLER MEMORIAL (3TR)



Use South Bend altimeter setting.

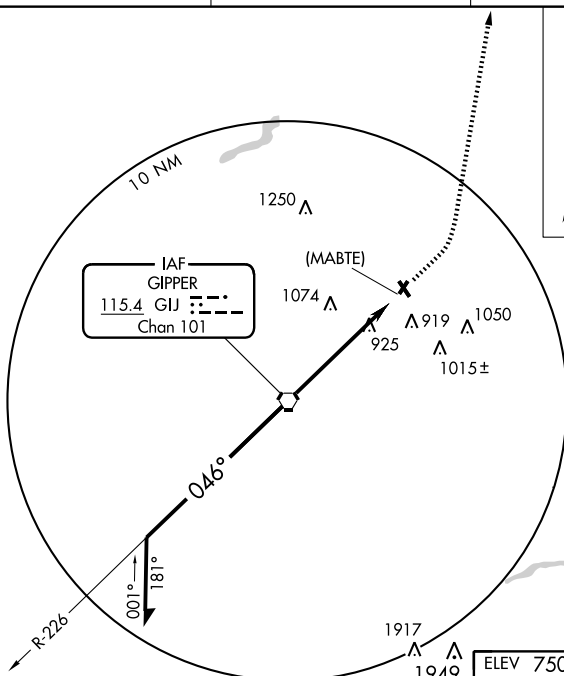


Straight-in minimums not authorized at night.

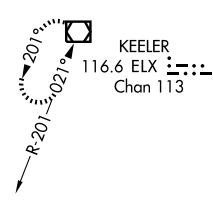
MISSED APPROACH: Climb to 2500, then left turn direct ELX VOR/DME and hold.

SOUTH BEND APP CON ★
118.55 257.8

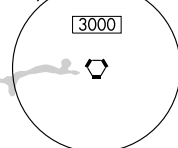
GCO
121.725

UNICOM
122.8 (CTAF) **L**

MISSED APCH FIX

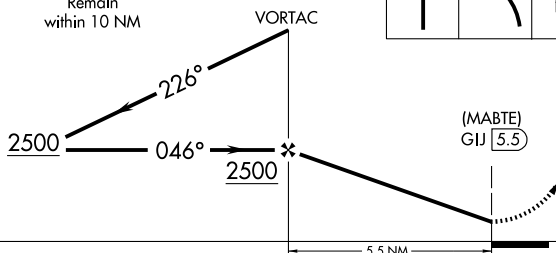


MSA G1J 25 NM



ELEV 750

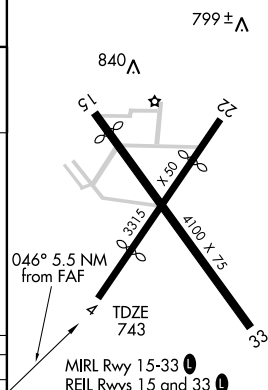
Remain
within 10 NM



2500



ELX



CATEGORY	5.5 NM			
	A	B	C	D
S-4	1200-1	457 (500-1)	1200-1¼ 457 (500-1¼)	1200-1½ 457 (500-1½)
CIRCLING	1300-1	557 (600-1)	1300-1½ 557 (600-1½)	1460-2¼ 717 (800-2¼)

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

VORTAC GJ	APP CRS	Rwy Idg	2565
115.4	225°	TDZE	743
Chan 101		Apt Elev	750

VOR or GPS RWY 22

NILES / JERRY TYLER MEMORIAL (3TR)

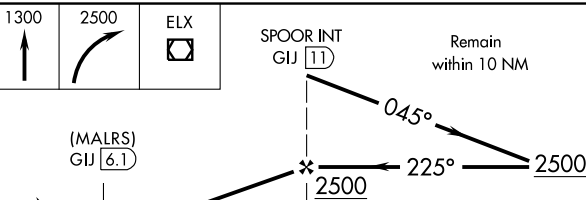
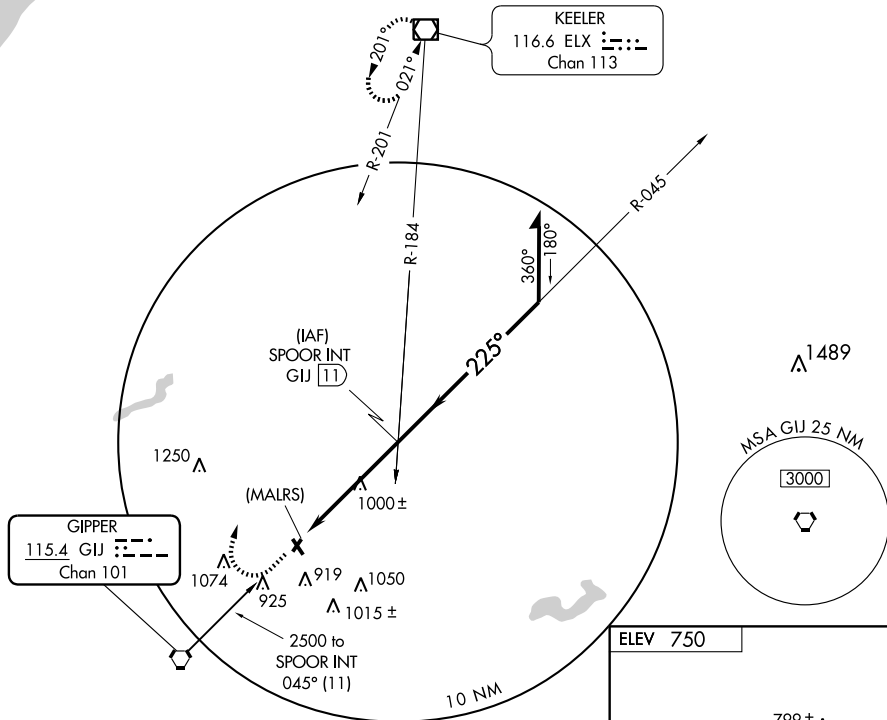
▼ Use South Bend altimeter setting.
 ▲ NA Straight-in minimums not authorized at night.

MISSED APPROACH: Climb to 1300, then climbing right turn to 2500 direct ELX VOR/DME and hold.

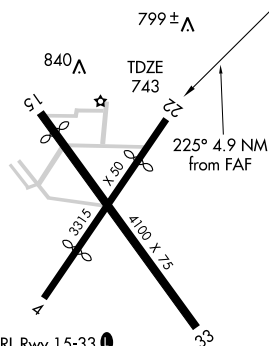
SOUTH BEND APP CON ★
118.55 257.8

GCO
121.725

UNICOM
122.8 (CTAF) 0



ELEV 750



MIRL Rwy 15-33 0
 REIL Rwy 15 and 33 0

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

ONAWAY

LEO E. GOETZ CO (Y96) 1 N UTC-5(-4DT) N45°22.25' W84°13.50'

LAKE HURON

830 B NOTAM FILE LAN

RWY 15-33: H2600X60 (ASPH) MIRL

RWY 15: Road. RWY 33: Trees.

RWY 03-21: 1400X100 (TURF)

RWY 03: Trees. RWY 21: Trees.

AIRPORT REMARKS: Unattended. Confirm snow removal and winter conditions phone 989-734-2216; or arpt manager residence 989-734-4309. 11' p-line 750' from thld 125' R of centerline. Rwy 03-21 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

ONONDAGA

GORILLA (11J) 2 SW UTC-5(-4DT) N42°25.50' W84°34.68'

DETROIT

980 NOTAM FILE LAN

Not insp

HELIPAD H1: 75X50 (TURF)

HELIPORT REMARKS: Attended irregularly. Marked with yellow steel plates. 45' trees 180'W of pad.

COMMUNICATIONS: CTAF 122.9

ONTONAGON CO-SCHUSTER FLD (OGM) 3 W UTC-5(-4DT) N46°50.73' W89°22.03'

GREEN BAY

669 B FUEL 100LL NOTAM FILE GRB

L-14J

RWY 17-35: H3500X75 (ASPH-AFSC) S-12 MIRL 0.7% up S

IAP

RWY 17: REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.

RWY 35: REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.

AIRPORT REMARKS: Unattended. 24 hr self serve fuel with VISA or Master Charge. Deer and birds on and in/ov arpt. MIRL Rwy 17-35 and PAPI Rwy 17 and Rwy 35 dusk-0400Z+; after 0400Z+ ACTIVATE-CTAF.

COMMUNICATIONS: CTAF 122.9

® MINNEAPOLIS CENTER APP/DEP CON 127.2

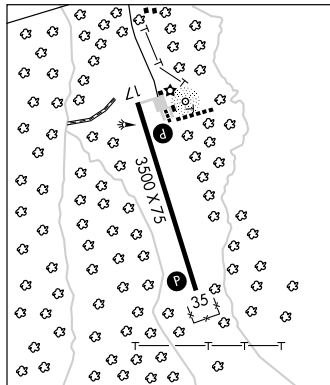
RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94'

W90°07.55' 058° 36.6 NM to fld. 1230/1E. HIWAS.

NDB (MHW) 375 OGM N46°51.01' W89°21.91' at fld.

Unmonitored. NOTAM FILE GRB.



NDB OGM 375	APP CRS 222°	Rwy Idg TDZE Apt Elev	N/A N/A 669
-----------------------	------------------------	-----------------------------	--------------------------

NDB or GPS-A

ONTONAGON COUNTY - SCHUSTER FIELD (OGM)

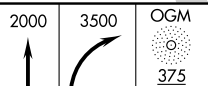
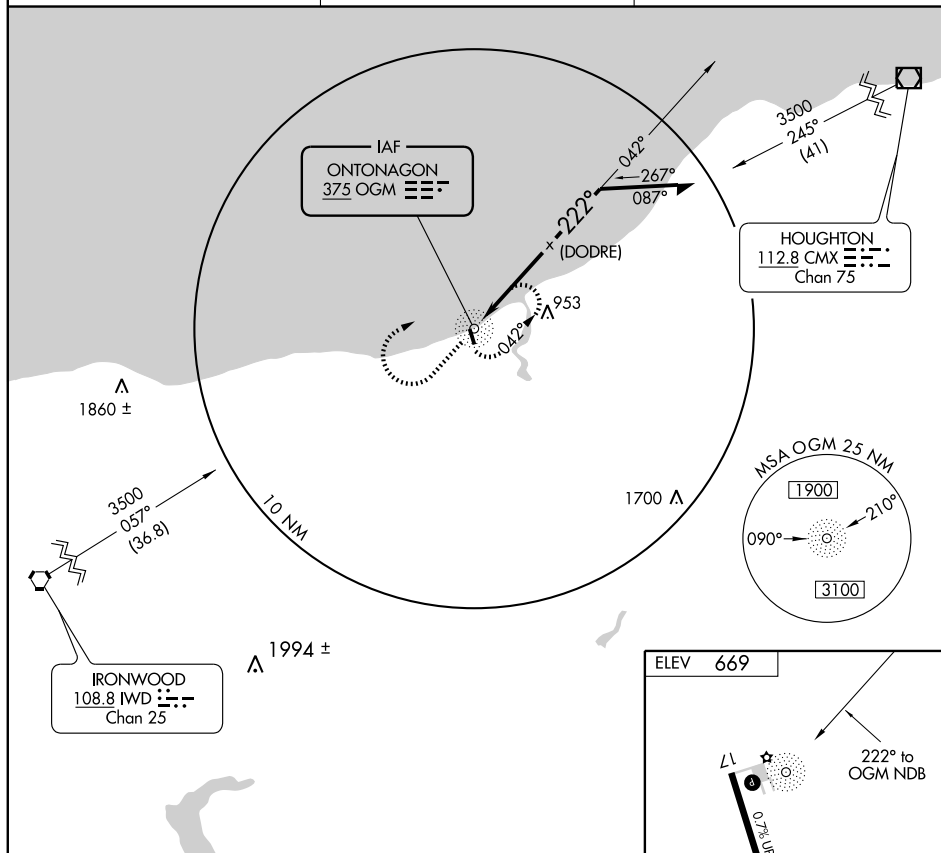
▼
▲ NA
Use Hancock altimeter setting, if not received
procedure NA.

MISSED APPROACH: Climb to 2000, then climbing right turn
to 3500 direct OGM NDB and hold.

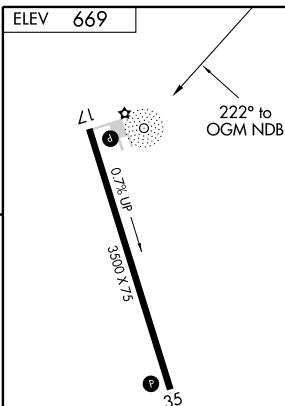
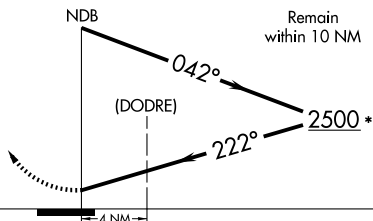
HANCOCK ASOS
125.675

MINNEAPOLIS CENTER
127.2 379.1

(CTAF)
122.9 0



* Maintain 3500 until
established outbound
on procedure turn.



CATEGORY	A	B	C	D
CIRCLING	1460-1 791 (800-1)	1460-1 ¼ 791 (800-1 ¼)	1460-2 ¼ 791 (800-2 ¼)	NA

MRL Rwy 17-35 0
REIL Rwy 17 and 35

OSCODA—WURTSMITH (OSC) 3 NW UTC-5(-4DT) N44°27.09' W83°23.65'

633 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE OSC

RWY 06-24: H11800X200 (ASPH-GRVD) S-155, D-330, 2S-175,
2D-550 HIRL

RWY 06: PAPI(P4L)—GA 3.0° TCH 75'. Tree.

RWY 24: MALSR. PAPI(P4L)—GA 3.0° TCH 72'.

AIRPORT REMARKS: Attended Mon-Fri dawn-dusk. During daylight hours tailwinds may exist over approach ends Rwy 06 and Rwy 24 simultaneously. Seagulls and migratory birds on and in vicinity of airport. Be alert for potential jet blast on Rwy A in vicinity of taxiway ramp. ACTIVATE HIRL Rwy 06-24, PAPI Rwy 06 and Rwy 24 and MALSR Rwy 24—CTAF.

WEATHER DATA SOURCES: AWOS-3 116.1 ASP (989) 739-1310

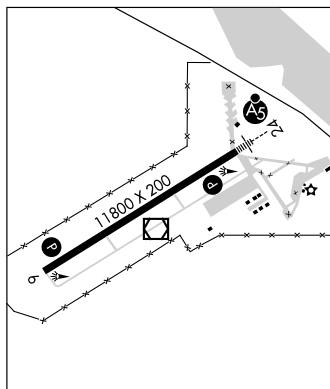
COMMUNICATIONS: CTAF/UNICOM 123.0

MINNEAPOLIS CENTER APP/DEP CON 125.475

RADIO AIDS TO NAVIGATION: NOTAM FILE OSC.

AU SABLE (H) VORW/DME 116.1 ASP Chan 108 N44°26.95'
W83°23.66' at fld. 625/7W. AWOS-3.

ILS 108.5 I-LJU Rwy 24. LOC and Glide Slope unmonitored.



LAKE HURON
H-11A, L-31C
IAP

OTTAWA EXECUTIVE (See ZEELAND)**OWOSSO COMMUNITY** (RNP) 2 E UTC-5(-4DT) N42°59.58' W84°08.31'

736 B S4 FUEL 100LL NOTAM FILE RNP

RWY 10-28: H4300X75 (ASPH) S-18 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 20'. Trees.

RWY 18-36: 2599X260 (TURF)

RWY 18: Thld displcd 396'. Bldg.

RWY 36: Thld displcd 990'. Trees.

RWY 06-24: 2483X130 (TURF)

RWY 06: PAPI(P4R)—GA 3.5° TCH 25'. Thld displcd 1057'. Trees.

RWY 24: Pole.

AIRPORT REMARKS: Attended 1400-2200Z±. Rwy 06-24 and Rwy 18-36 CLOSED Dec 1 thru Mar 31 and when snow covered. Deer and birds on and in vicinity of airport. Rwy 10-28 has numerous cracks. Rwy 06-24 and Rwy 18-36 marked with cones; Rwy 06; Rwy 18; Rwy 36 displcd thlds marked with 3 cones each side. ACTIVATE MRL Rwy 10-28, PAPI Rwy 10 and 28 and REIL Rwy 10 and Rwy 28—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.025 (989) 729-2967.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

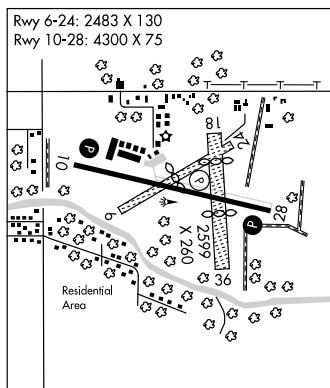
Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 281° 17.3 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.



DETROIT
L-28J
IAP

PADGHAM FLD (See ALLEGAN)**PARCHMENT****TRIPLE H** (2H4) 3N UTC-5(-4DT) N42°21.92' W85°33.35'

785 NOTAM FILE LAN

RWY 01-19: 2400X100 (TURF)

RWY 01: Thld displcd 400'. Tree. Rgt tfc. RWY 19: Thld displcd 968'. Trees.

RWY 09-27: 2600X100 (TURF)

RWY 09: Trees. Rgt tfc. RWY 27: Thld displcd 1200'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer in vicinity of airport. Rwy 09-27, 80' trees along both rwy edges. Rwy 09-27 fence at west end. Rwy 01-19 and displcd thlds marked with 3' yellow cones. Rwy 09-27 and displcd thld marked with yellow cones. Rwy 01-19 NSTD LIRL not for public use.

COMMUNICATIONS: CTAF: 122.9

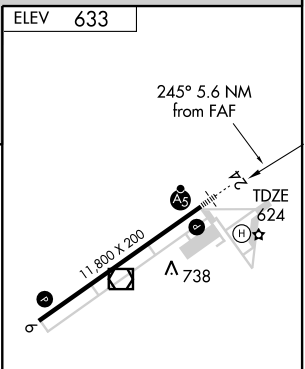
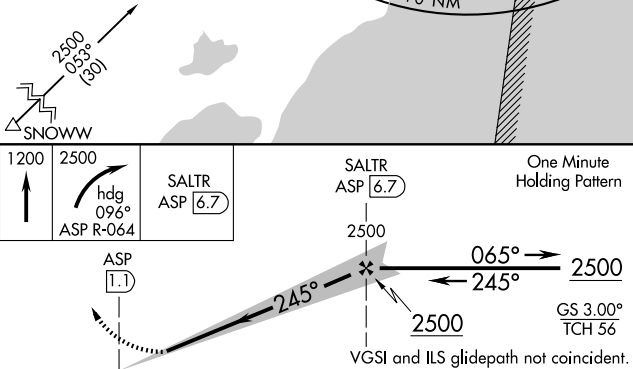
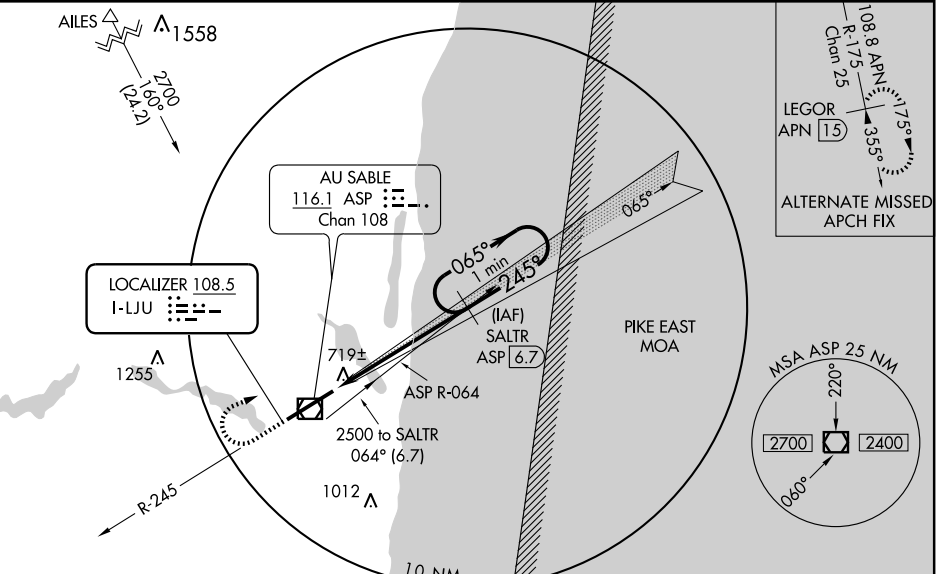
CHICAGO

LOC 1-LJU 108.5	APP CRS 245°	Rwy Idg 11,800 TDZE 624 Apt Elev 633
---------------------------	------------------------	---

ILS or LOC/DME RWY 24 OSCODA-WURTSMITH (OSC)

<p>NA</p> <p>Circling NA southeast of Rwy 6-24. DME from ASP VOR/DME. Simultaneous reception of 1-LJU and ASP DME required. When local altimeter setting not received, use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase S-LOC 24 Cat C and D visibility ¼ mile, and increase circling Cat C visibility ¼ mile. For inoperative MALSRR when using Alpena altimeter setting increase S-ILS all Cats visibility to 1 mile.</p>	<p>MALSRR</p> <p>AS</p>	<p>MISSED APPROACH: Climb to 1200 then climbing right turn to 2500 via heading 096° and ASP VOR/DME R-064 to SALTR/ASP 6.7 DME and hold.</p>
--	---------------------------------------	---

AWOS-3 116.1	MINNEAPOLIS CENTER 125.475 269.45	UNICOM 123.0 (CTAF) 0
-------------------------------	--	--



CATEGORY	A	B	C	D
S-ILS 24		824-½	200 (200-½)	
S-LOC 24		980-½	356 (400-½)	980-¾ 356 (400-¾)
CIRCLING	1140-1	507 (600-1)	1140-½ 507 (600-½)	1200-2 567 (600-2)

ELEV 633
HIRL Rwy 6-24 0

WAAS CH 97417 W06A	APP CRS 065°	Rwy Idg 11,800 TDZE 633 Apt Elev 633
--	------------------------	---

RNAV (GPS) RWY 6 OSCODA-WURTSMITH (OSC)



Circling NA southeast of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Alpena altimeter setting. Baro-VNAV NA when using Alpena altimeter setting. When local altimeter setting not received use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase LPV and LNAV/VNAV all Cats visibility ½ mile, and LNAV Cat C and D and circling Cat C visibility ¼ mile.

MISSED APPROACH:
Climb to 2500 direct KOWKU and hold.

AWOS-3

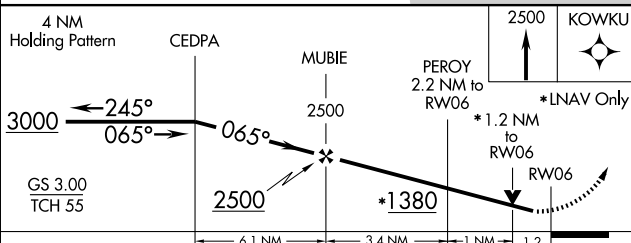
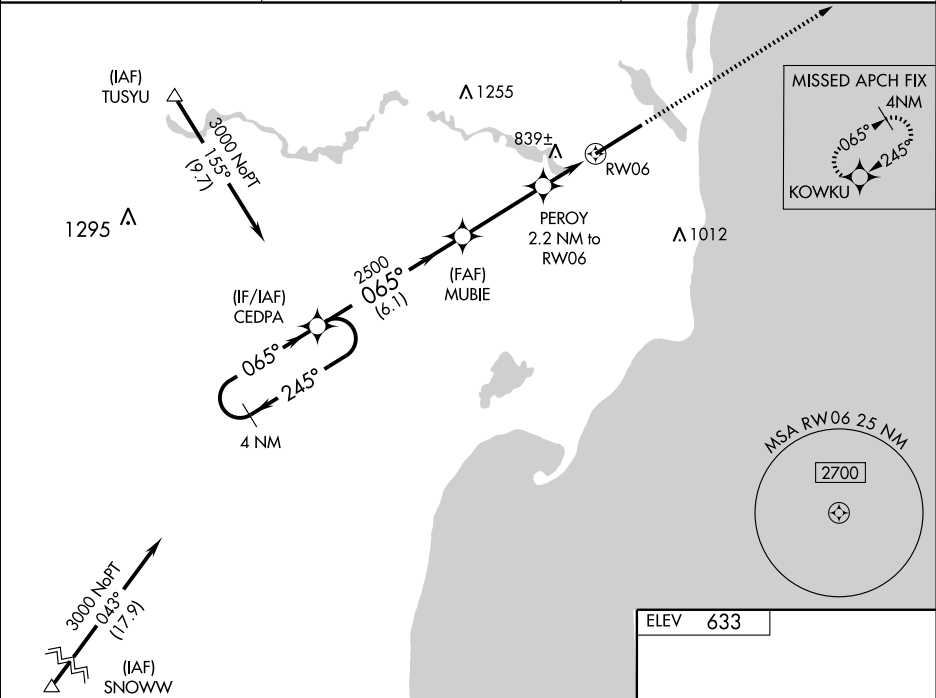
116.1

MINNEAPOLIS CENTER

125.475 269.45

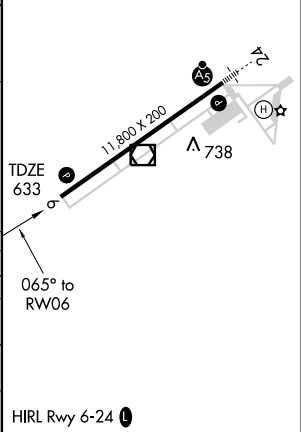
UNICOM

123.0 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA	892-3/4 259 (300-3/4)			
LNAV/ VNAV DA	1148-1 3/4 515 (600-1 3/4)			
LNAV MDA	1080-1 447 (500-1)	1080-1 1/4 447 (500-1 1/4)	1080-1 1/2 447 (500-1 1/2)	
CIRCLING	1140-1 507 (600-1)	1140-1 1/2 507 (600-1 1/2)	1200-2 567 (600-2)	

ELEV **633**



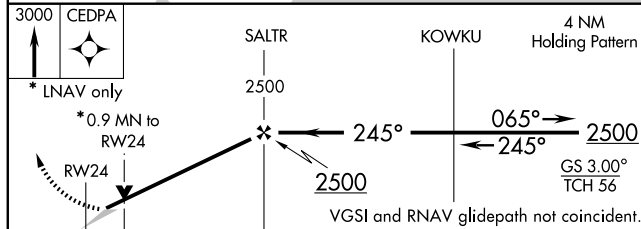
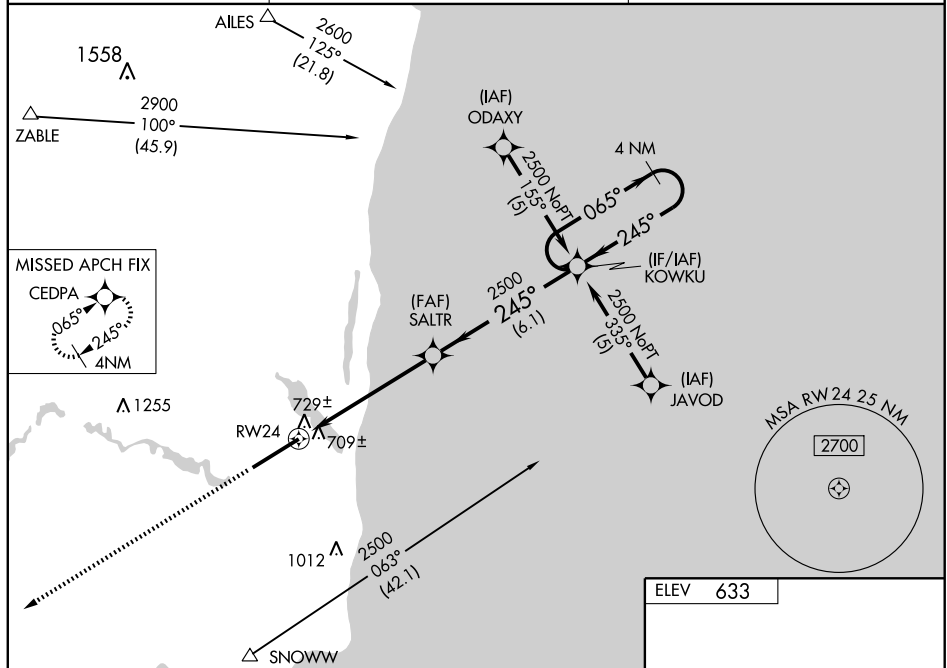
WAAS CH 82317 W24A	APP CRS 245°	Rwy Idg 11,800 TDZE 624 Apt Elev 633
--	------------------------	---

RNAV (GPS) RWY 24 OSCODA-WURTSMITH (OSC)

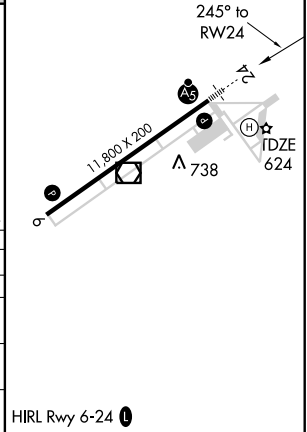
▼ Circling NA southeast of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase LNAV/VNAV all Cats visibility ½ mile, and increase LNAV and circling Cat C visibility ¼ mile. VDP NA with Alpena altimeter setting. Baro-VNAV NA when using Alpena altimeter setting. For inoperative MALS, increase LNAV Cat D visibility to 1¼ mile. For inoperative MALS when using Alpena altimeter setting increase LPV all Cats visibility to 1 mile.

MALS
A5
MISSED APPROACH:
Climb to 3000 direct
CEDPA and hold.

AWOS-3 116.1	MINNEAPOLIS CENTER 125.475 269.45	UNICOM 123.0 (CTAF) ①
------------------------	---	---------------------------------



CATEGORY	A	B	C	D
LPV DA	824-½	200 (200-½)		
LNAV/VNAV DA	1004-¾	380 (400-¾)		
LNAV MDA	980-½	356 (400-½)	980-1	356 (400-1)
CIRCLING	1140-1	507 (600-1)	1140-1½	507 (600-1½)
			1200-2	567 (600-2)



VOR/DME ASP 116.1 Chan 108	APP CRS 070°	Rwy Idg 11,800 TDZE 634 Apt Elev 634
--	------------------------	---

VOR RWY 6

OSCODA-WURTSMITH (OSC)

▼ Circling NA southeast of Rwy 6 and 24. VDP NA when using Alpena altimeter setting. When local altimeter setting not received, use Alpena altimeter setting and increase all MDAs 100 feet and DOGSY Fix minimums visibility S-6/Circling Cat C ¼ mile, S-6 Cat D ¼ mile.

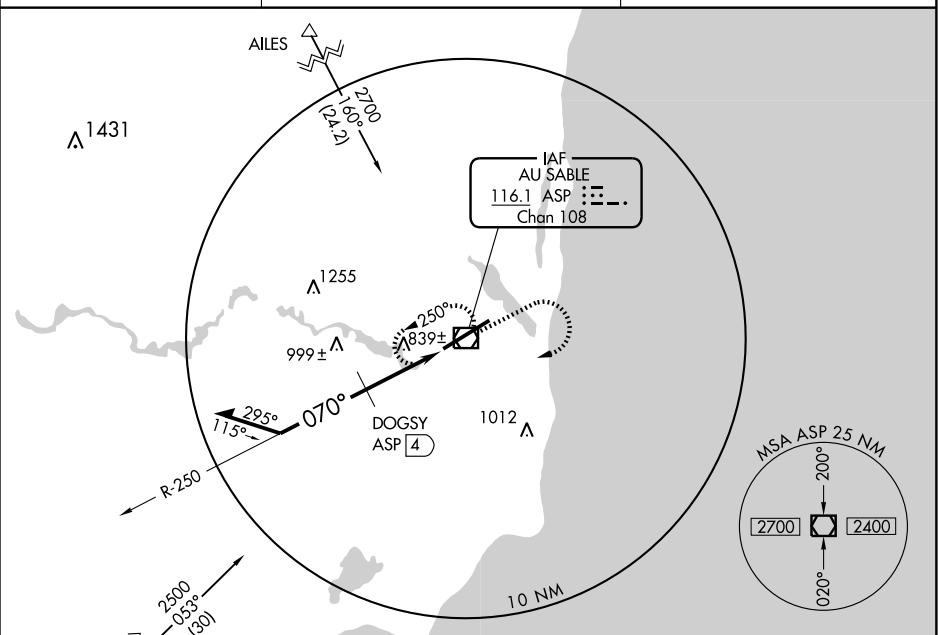
▲ NA

MISSED APPROACH: Climb to 2500 then right turn direct ASP VOR/DME and hold.

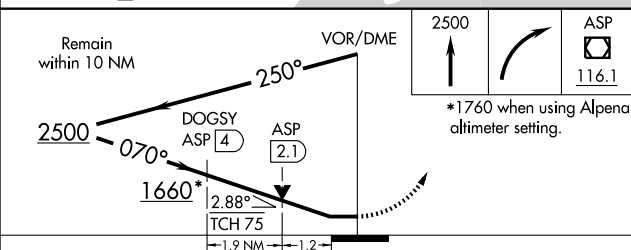
AWOS-3
116.1

MINNEAPOLIS CENTER
125.475 269.45

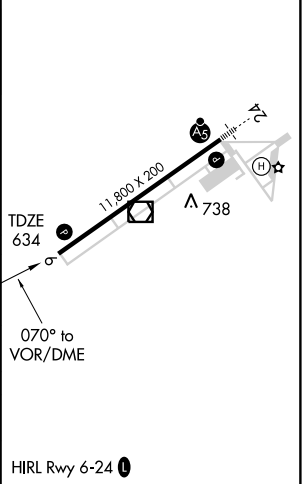
UNICOM
123.0 (CTAF) 0



ELEV **634**



CATEGORY	A	B	C	D
S-6	1660-1¼ 1026 (1100-1¼)	1660-1½ 1026 (1100-1½)	1660-3	1026 (1100-3)
CIRCLING	1660-1¼ 1026 (1100-1¼)	1660-1½ 1026 (1100-1½)	1660-3	1026 (1100-3)
DOGSY FIX MINIMUMS				
S-6	1100-1	466 (500-1)	1100-1¼ 466 (500-1¼)	1100-1½ 466 (500-1½)
CIRCLING	1140-1	506 (600-1)	1140-1½ 506 (600-1½)	1200-2 566 (600-2)



OSCODA—WURTSMITH (OSC) 3 NW UTC-5(-4DT) N44°27.09' W83°23.65'

633 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE OSC

RWY 06-24: H11800X200 (ASPH-GRVD) S-155, D-330, 2S-175,
2D-550 HIRL

RWY 06: PAPI(P4L)—GA 3.0° TCH 75'. Tree.

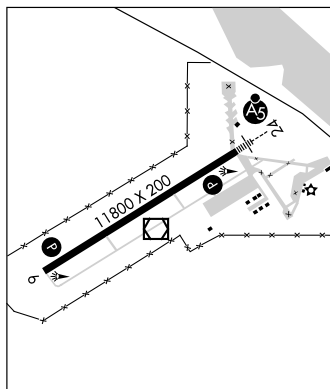
RWY 24: MALSR. PAPI(P4L)—GA 3.0° TCH 72'.

AIRPORT REMARKS: Attended Mon-Fri dawn-dusk. During daylight hrs tailwinds may exist over approach ends Rwy 06 and Rwy 24 simultaneously. Seagulls and migratory birds on and in vicinity of airport. Be alert for potential jet blast on Rwy A in vicinity of taxiway ramp. ACTIVATE HIRL Rwy 06-24, PAPI Rwy 06 and Rwy 24 and MALSR Rwy 24—CTAF.**WEATHER DATA SOURCES:** AWOS-3 116.1 ASP (989) 739-1310**COMMUNICATIONS:** CTAF/UNICOM 123.0

MINNEAPOLIS CENTER APP/DEP CON 125.475

RADIO AIDS TO NAVIGATION: NOTAM FILE OSC.AU SABLE (H) VORW/DME 116.1 ASP Chan 108 N44°26.95'
W83°23.66' at fld. 625/7W. AWOS-3.

ILS 108.5 I-LJU Rwy 24. LOC and Glide Slope unmonitored.

**OTTAWA EXECUTIVE** (See ZEELAND)**OWOSSO COMMUNITY** (RNP) 2 E UTC-5(-4DT) N42°59.58' W84°08.31'

736 B S4 FUEL 100LL NOTAM FILE RNP

RWY 10-28: H4300X75 (ASPH) S-18 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 20'. Trees.

RWY 18-36: 2599X260 (TURF)

RWY 18: Thld disp'd 396'. Bldg.

RWY 36: Thld disp'd 990'. Trees.

RWY 06-24: 2483X130 (TURF)

RWY 06: PAPI(P4R)—GA 3.5° TCH 25'. Thld disp'd 1057'. Trees.

RWY 24: Pole.

AIRPORT REMARKS: Attended 1400-2200Z±. Rwy 06-24 and Rwy 18-36 CLOSED Dec 1 thru Mar 31 and when snow covered. Deer and birds on and in vicinity of airport. Rwy 10-28 has numerous cracks. Rwy 06-24 and Rwy 18-36 marked with cones; Rwy 06; Rwy 18; Rwy 36 disp'd thlds marked with 3 cones each side. ACTIVATE MRL Rwy 10-28, PAPI Rwy 10 and 28 and REIL Rwy 10 and Rwy 28—CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.025 (989) 729-2967.**COMMUNICATIONS:** CTAF/UNICOM 123.0

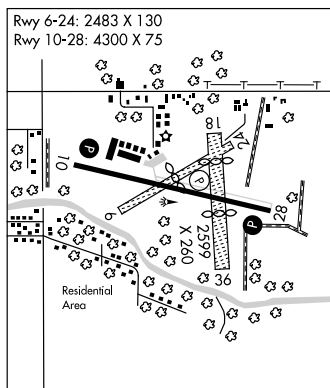
FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 281° 17.3 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.**PADGHAM FLD** (See ALLEGAN)**PARCHMENT****TRIPLE H** (2H4) 3N UTC-5(-4DT) N42°21.92' W85°33.35'

785 NOTAM FILE LAN

RWY 01-19: 2400X100 (TURF)

RWY 01: Thld disp'd 400'. Tree. Rgt tfc. RWY 19: Thld disp'd 968'. Trees.

RWY 09-27: 2600X100 (TURF)

RWY 09: Trees. Rgt tfc. RWY 27: Thld disp'd 1200'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer in vicinity of airport. Rwy 09-27, 80' trees along both rwy edges. Rwy 09-27 fence at west end. Rwy 01-19 and disp'd thlds marked with 3' yellow cones. Rwy 09-27 and disp'd thld marked with yellow cones. Rwy 01-19 NSTD LIRL not for public use.**COMMUNICATIONS:** CTAF: 122.9

DETROIT

L-28J

IAP

CHICAGO

WAAS CH 50209 W10A	APP CRS 109°	Rwy Idg TDZE Apt Elev 736	4300 736
--	------------------------	---	---------------------------

RNAV (GPS) RWY 10

OWOSSO COMMUNITY (RNP)

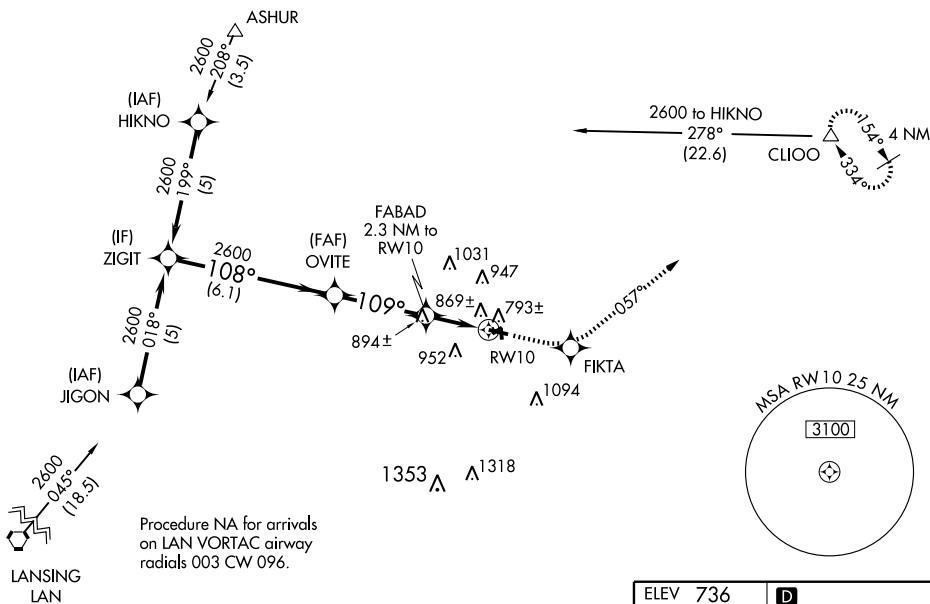
▼ Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all DA 47 feet and LPV visibility $\frac{1}{4}$ mile all Cats, increase all MDA 60 feet and LNAV Cat C visibility $\frac{1}{4}$ mile. Baro-VNAV NA when using Flint altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct FIKTA and via 057° track to CLIOO and hold.

AWOS-3
118.025

FLINT APP CON
118.8 257.9

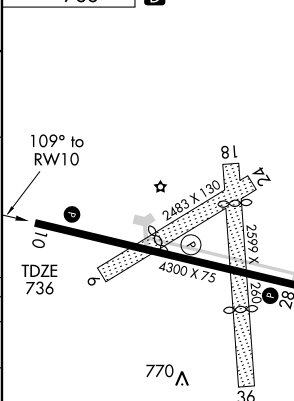
UNICOM
123.0 (CTAF) 0



VGSI and RNAV glidepath not coincident.

CATEGORY	A		B		C		D	
	LPV	DA	LPV	DA	LPV	DA	LPV	DA
LPV DA	1079-1 $\frac{1}{4}$		343 (400-1 $\frac{1}{4}$)				NA	
LNAV/VNAV DA	1258-2		522 (600-2)				NA	
LNAV MDA	1180-1		444 (500-1)		1180-1 $\frac{1}{4}$ 444 (500-1 $\frac{1}{4}$)		NA	
CIRCLING	1240-1		504 (600-1)		1260-1 $\frac{1}{2}$ 524 (600-1 $\frac{1}{2}$)		NA	

ELEV 736 **D**



REIL Rwy 10 and 28 **0**
MRL Rwy 10-28 **0**

APP CRS	Rwy Idg	4300
289°	TDZE	736
	Apt Elev	736

RNAV (GPS) RWY 28

OWOSSO COMMUNITY (RNP)

T Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all MDA 60 feet and LNAV Cat C visibility $\frac{1}{4}$ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

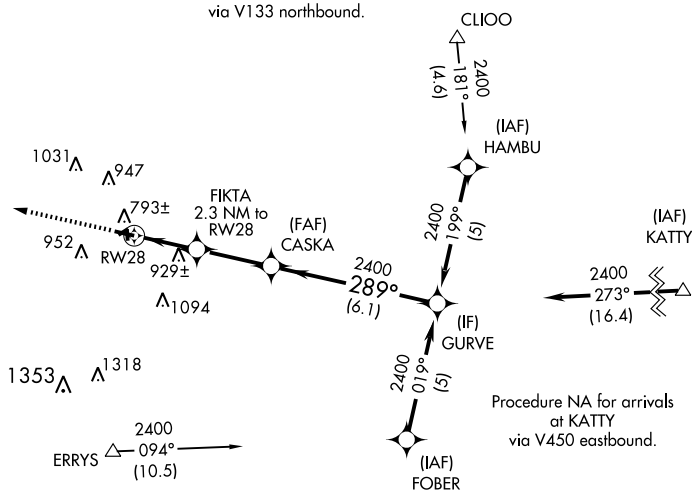
MISSED APPROACH: Climb to 2600 direct ZIGIT and hold.

AWOS-3
118.025

FLINT APP CON
118.8 257.9

UNICOM
123.0 (CTAF) **L**

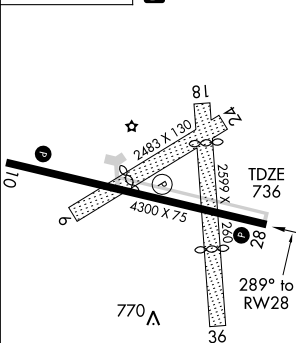
Procedure NA for arrivals
at CLIOO
via V133 northbound.



Procedure NA for arrivals
at KATTY
via V450 eastbound.

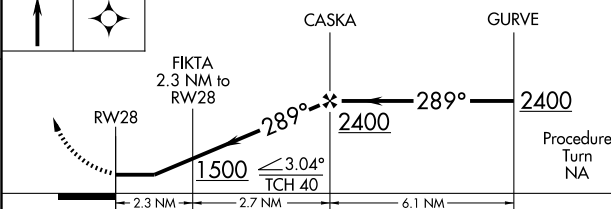
Procedure NA for arrivals at ERRYS via V84 westbound.

ELEV 736	D
----------	---



REIL Rwy 10 and 28 **L**
MIRL Rwy 10-28 **L**

2600	ZIGIT	VGSI and descent angles not coincident.
------	-------	---



Procedure

Turn

CATEGORY	A	B	C	D
LNAV MDA	1180-1	444 (500-1)	1180-1¼ 444 (500-1¼)	NA
CIRCLING	1240-1	504 (600-1)	1260-1½ 524 (600-1½)	NA

OWOSSO, MICHIGAN
Amdt 1 10154

43°00'N - 84°08'W

OWOSSO COMMUNITY (R.N.P)
RNAV (GPS) RWY 28

EC-1. 26 AUG 2010 to 23 SEP 2010

VORTAC FNT <u>116.9</u> Chgn 116	APP CRS 281°	Rwy Idg 4300 TDZE 736 Apt Elev 736
---	------------------------	---

VOR/DME RWY 28
OWOSSO COMMUNITY (RNP)

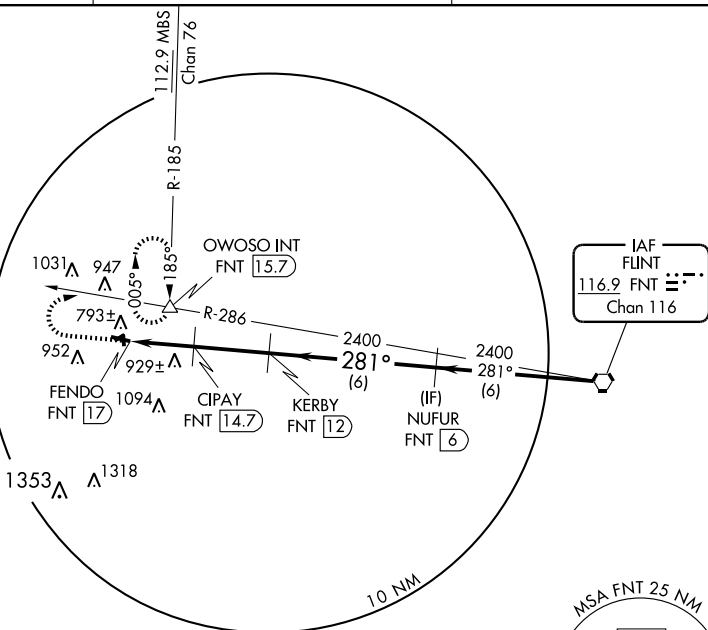
T Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all MDA 60 feet and S-28 Cat C visibility $\frac{1}{4}$ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1900 then climbing right turn to 2700 via FNT VORTAC R-286 to OWOSO INT and hold.

AWOS-3
118.025

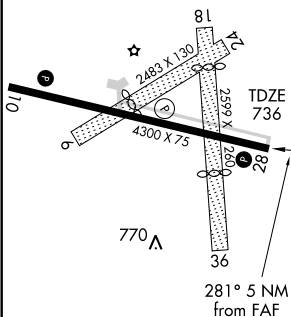
FLINT APP CON
118.8 257.9

UNICOM
123.0 (CTAF) **L**

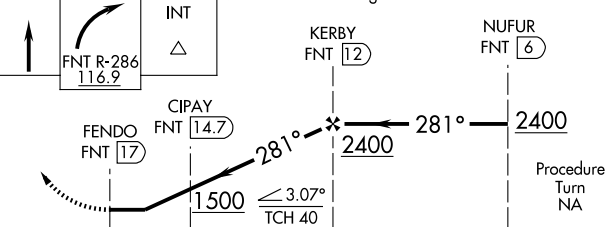


ELEV 736

D



1900	2700	OWOSO	VGSI and descent angles not coincident.
------	------	-------	---



REIL Rwy 10 and 28 **L**
MIRL Rwy 10-28 **L**

CATEGORY	A	B	C	D
S-28	1180-1	444 (500-1)	1180-1 $\frac{1}{4}$ 444 (500-1 $\frac{1}{4}$)	NA
CIRCLING	1240-1	504 (600-1)	1260-1 $\frac{1}{2}$ 524 (600-1 $\frac{1}{2}$)	NA

OWOSSO, MICHIGAN
Amdt 1 10154

43°00'N - 84°08'W

OWOSSO COMMUNITY (RNP)
VOR/DME RWY 28

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

PARK TOWNSHIP (See HOLLAND)**PAUL C. MILLER-SPARTA** (See SPARTA)**PAW PAW****ALMENA** (2C5) 3 NE UTC-5(-4DT) N42°15.15' W85°51.02'

CHICAGO

740 NOTAM FILE LAN

RWY 09-27: 3300X100 (TURF)**RWY 09:** Thld dsplcd 1085'. Trees.**RWY 27:** Thld dsplcd 1159'. Trees.**AIRPORT REMARKS:** Attended irregularly. Occasional deer on rwy. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones; dsplcd thlds marked with three 3' yellow cones on each side of rwy.**COMMUNICATIONS:** CTAF 122.9**PBEAAYE** (See TOPINABEE)**PECK** N43°15.35' W82°43.08' NOTAM FILE LAN.

DETROIT

(H) VORTAC 114.0 ECK Chan 87 289° 16.7 NM to Marlette. 810/7W. HIWAS.

H-10G, 11A, L-28J

RCO 122.1R 114.0T (LANSING RADIO)**PELLSTON RGNL ARPT OF EMMET CO** (PLN) 1 NW UTC-5(-4DT)

LAKE HURON

N45°34.26' W84°47.80'

H-2K, L-31B

721 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE PLN

IAP

RWY 14-32: H6513X150 (ASPH-GRVD) D-65, 2S-82, 2D-82,

2D/2D2-120 HIRL

RWY 14: REIL. VASI(V4L)—GA 3.0° TCH 52'. Trees.**RWY 32:** MALSR. Tree.**RWY 05-23:** H5401X150 (ASPH-GRVD) D-65, 2S-82, 2D-82,

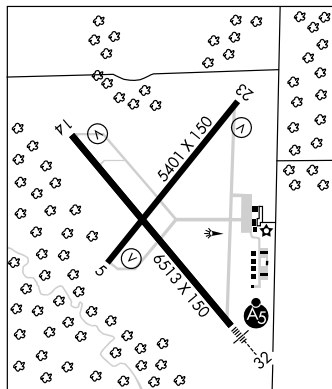
2D/2D2-120 MIRL

RWY 05: REIL. VASI(V4R)—GA 3.0° TCH 48'. Trees.**RWY 23:** REIL. VASI(V4L)—GA 3.0° TCH 45'. Road.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 05:** TORA-5395 TODA-5395 ASDA-5395 LDA-5395**RWY 14:** TORA-6512 TODA-6512 ASDA-6512 LDA-6512**RWY 23:** TORA-5395 TODA-5395 ASDA-5395 LDA-5395**RWY 32:** TORA-6512 TODA-6512 ASDA-6512 LDA-6512**AIRPORT REMARKS:** Attended 1100-0400Z+. Arpt CLOSED to unscheduled air carriers with more than 30 passenger seats except by 24 hr PPR. Deer and gulls occasionally on and in/ovf arpt. Be alert for snow removal equipment and activity on and in/ovf rws during winter months. Twy B1 and E1 CLOSED 1 Nov thru 15 Apr. MIRL Rwy 05-23 and HIRL Rwy 14-32; REIL Rws 05 and 14 and 23 and MALSR Rwy 32 preset low ints 0530-1000Z+, after 1000Z+ to increase ints and ACTIVATE—CTAF. Rwy 05 and Rwy 23 REIL lctd 100' from their respective apch ends. Ldg fee (waived with fuel purchase).**WEATHER DATA SOURCES:** ASOS 119.025 (231) 539-7700. HIWAS 111.8 PLN.**COMMUNICATIONS:** CTAF/UNICOM 123.0**RCO** 122.3 (LANSING RADIO)**RCO** 123.6 122.2 (LANSING RADIO)**MINNEAPOLIS CENTER APP/DEP CON** 134.6**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

(L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 243° 6.6 NM to fld. 840/6W. HIWAS.

VOR unusable 301°-339°.

ILS 111.3 I-PLN Rwy 32. Class IE.

**PETERSBURG****GRADOLPH FLD** (88G) 2 NW UTC-5(-4DT) N41°55.19' W83°44.10'

DETROIT

673 B S4 NOTAM FILE LAN

COPTER

RWY 09-27: 2306X110 (TURF) LIRL (NSTD)**RWY 09:** Thld dsplcd 310'. Trees.**RWY 27:** Thld dsplcd 230'. P-line.**AIRPORT REMARKS:** Attended continuously. For LIRL Rwy 09-27 and rotating bcn call 734-279-1679. Rwy 09-27 and dsplcd thlds marked with yellow cones. Rwy 09-27 NSTD LIRL due to lens color and configuration. Rotating bcn OTS indef.**COMMUNICATIONS:** CTAF 122.9**PETLI** N42°58.09' W83°53.41' NOTAM FILE FNT.

DETROIT

NDB (LOM) 269 FN 097° 6.5 NM to Bishop Intl. Unmonitored when twr clsd.

LOC I-PLN	APP CRS	Rwy Idg	6512
<u>111.3</u>	321°	TDZE	712
		Apt Elev	721

ILS or LOC RWY 32

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

T When local altimeter setting not received, use Harbor Springs altimeter setting and increase DA 28 feet, and **A** all MDA 40 feet, increase S-LOC 32 Cat D and EMHUR fix minimums S-LOC 32 Cat C visibilities $\frac{1}{4}$ mile.

MALSR

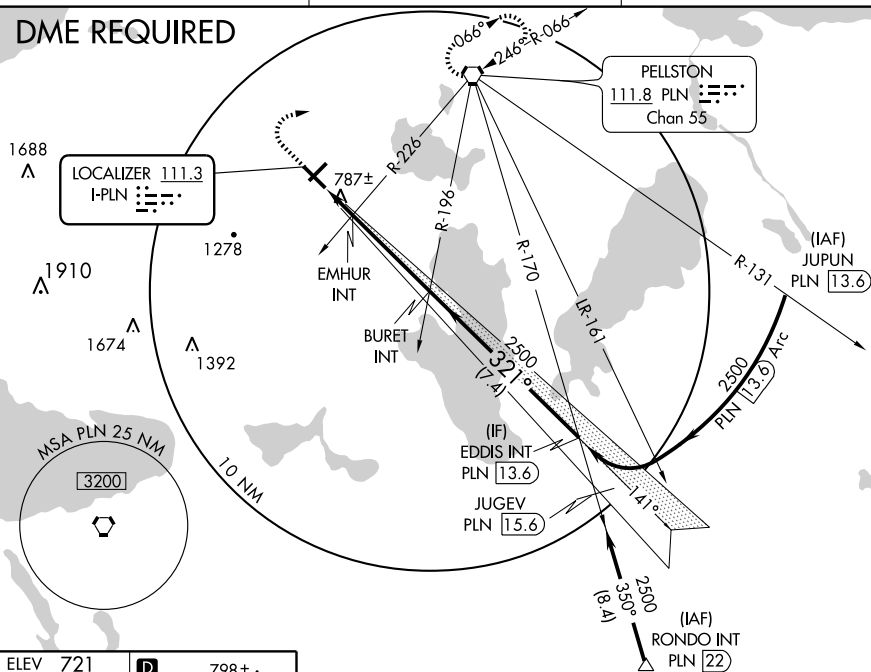
MISSED APPROACH: Climb to 1400 then climbing right turn to 2600 direct PLN VORTAC and hold.

ASOS
119.025

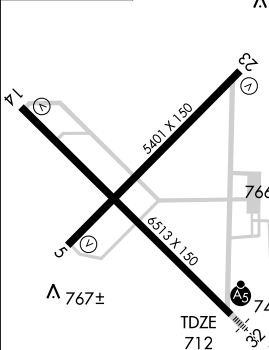
MINNEAPOLIS CENTER
134.6 354.05

UNICOM
123.0 (CTAF) **L**

DME REQUIRED



ELEV 721	D	798± ^A
----------	----------	-------------------






HIRL Rwy 14-32 **L**
MIRL Rwy 5-23 **L**
REIL Rwy 5, 14, and 23 **L**

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

PELLSTON, MICHIGAN

Amdt 11 09295

1400	2600	PLN
		
		<u>111.8</u>

* LOC only.

A diagram of a 1D lattice represented as a horizontal line with vertical tick marks. The lattice is divided into three segments by two internal tick marks. The first segment on the left is labeled "1.5 nm". The middle segment is labeled "3.9 nm". The third segment on the right is labeled "7.4 nm".

CATEGORY	A	B	C	D
S-II S 32		912-1/6	200 (200-1/6)	

S-LOC 32	1220-1/2 508 (500-1/2)	1220-1 508 (500-1)
----------	------------------------	--------------------

	1220-1/2 300 (300-1/2)		1220-1 300 (300-1/2)	
CIRCLING	1260-1	1280-1	1280-1 1/2	1420-2 1/4

CIRCLING	539 (600-1)	559 (600-1)	559 (600-1½)	699 (700-2¼)
	EMPHASIS MINIMALIS			

	EMPIRICAL MINIMUMS		
S-LOC 32	1080- $\frac{1}{2}$	368 (400- $\frac{1}{2}$)	1080- $\frac{3}{4}$

	1260-1/2 - 1280-1/2			368 (400-3/4)
CIRCUIT	1260-1	1280-1	1280-1 1/2	1420-2 1/4

CIRCLING	539 (600-1)	559 (600-1)	559 (600-1½)	699 (700-2¼)
----------	-------------	-------------	--------------	--------------

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

45°34'N - 84°48'W

ILS or LOC RWY 32

APP CRS	Rwy Idg	5395
051°	TDZE	716
	Apt Elev	721

RNAV (GPS) RWY 5

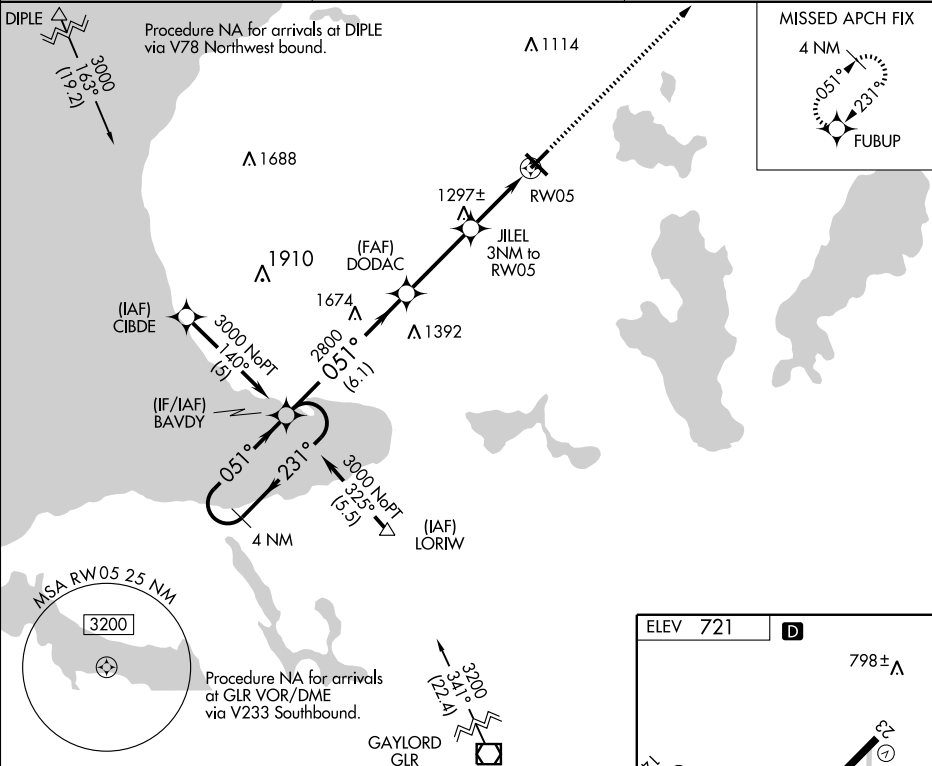
PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

T DME/DME RNP-0.3 NA. Visibility reductions by helicopters NA.
A When local altimeter setting not received, use Harbor Springs altimeter setting and increase all MDA 40 feet, increase LNAV Cat. A/C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2400 direct FUBUP and hold.

ASOS
119.025

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
123.0 (CTAF) **L**

4 NM
Holding Pattern

BAVDY

DODAG

NM to
DVA/OE

2400

FUBUP

ELEV 721

 $798 \pm \Delta$

⑦

1

1

→

/

BY

LD

EL R

- Rv

TC

↓

CATEGORY	A	B	C	D
LNAV MDA	1560-1 844 (900-1)	1560-1 $\frac{1}{4}$ 844 (900-1 $\frac{1}{4}$)	1560-2 $\frac{1}{2}$ 844 (900-2 $\frac{1}{2}$)	1560-2 $\frac{3}{4}$ 844 (900-2 $\frac{3}{4}$)
CIRCLING	1560-1 839 (900-1)	1560-1 $\frac{1}{4}$ 839 (900-1 $\frac{1}{4}$)	1560-2 $\frac{1}{2}$ 839 (900-2 $\frac{1}{2}$)	1560-2 $\frac{3}{4}$ 839 (900-2 $\frac{3}{4}$)

HIRL Rwy 14-32 **L**
MIRL Rwy 5-23 **L**
REIL Rwy 5, 14, and 23 **L**

PELLSTON, MICHIGAN
Orig 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)
45°24'N - 84°48'W DME/V (GPS) DME/V 5

RNAV (GPS) RWY 5

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1 26 AUG 2010 to 23 SEP 2010

WAAS CH 81915 W23A	APP CRS 231°	Rwy Idg 5395 TDZE 721 Apt Elev 721
--	------------------------	---

RNAV (GPS) RWY 23

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

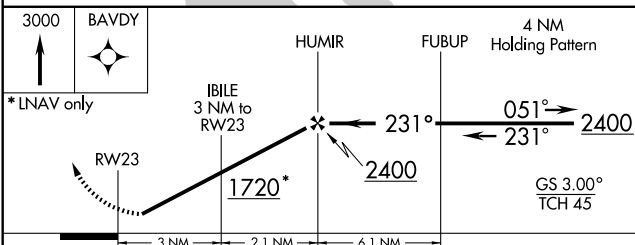
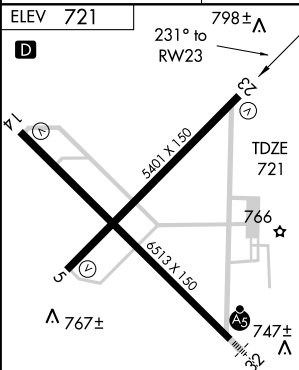
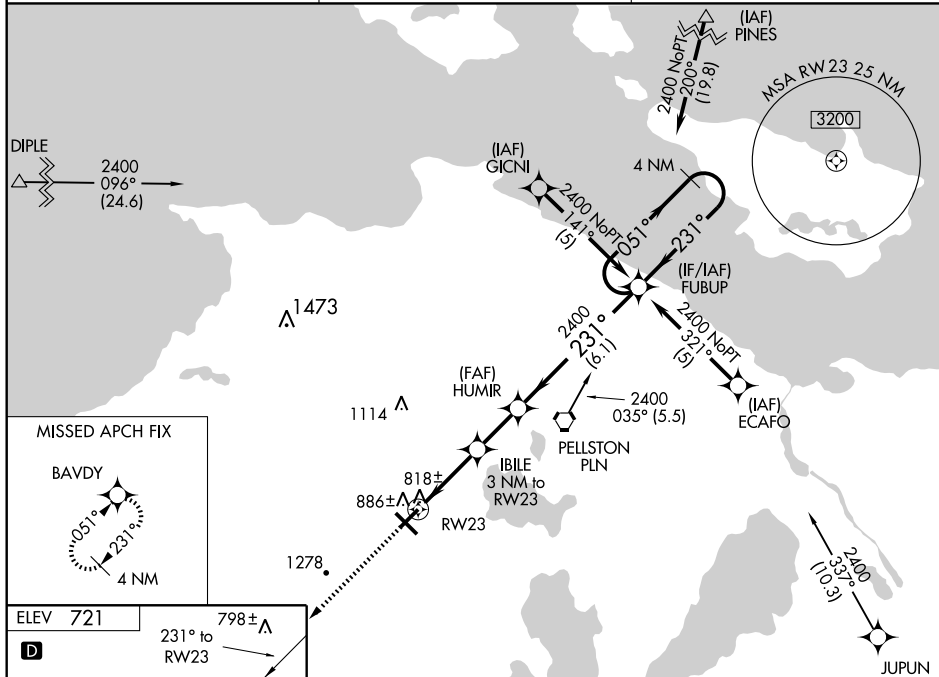
- ▼ Baro-VNAV NA when using Harbor Springs altimeter setting.
- ▲ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Harbor Springs altimeter setting and increase all DA 28 feet, all MDA 40 feet, increase LNAV/VNAV all Cats visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct BAVDY and hold.

ASOS
119.025

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
123.0 (CTAF) 0



CATEGORY	A	B	C	D
LPV DA	1057-1¼		336 (400-1¼)	
LNAV/VNAV DA	1109-1¼		338 (400-1¼)	
LNAV MDA	1240-1	519 (600-1)	1240-1½	1240-1¾
			519 (600-1½)	519 (600-1¾)
CIRCLING	1260-1	1280-1	1280-1½	1420-2¼
	539 (600-1)	559 (600-1)	559 (600-1½)	699 (700-2¼)

PELLSTON, MICHIGAN
Orig 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)
45°34'N - 84°48'W
RNAV (GPS) RWY 23

WAAS CH 77813 W32A	APP CRS 321°	Rwy Idg TDZE Apt Elev	6512 712 721
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 32

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

▼ Inoperative table does not apply to LNAV Cat D. Baro-VNAV NA when using
▲ Harbor Springs altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Harbor Springs altimeter setting and increase all DA 28 feet and all MDA 40 feet. For inoperative MALSR when using Harbor Springs altimeter setting, increase LNAV Cat D visibility to 1 ¼ mile.

MALSR

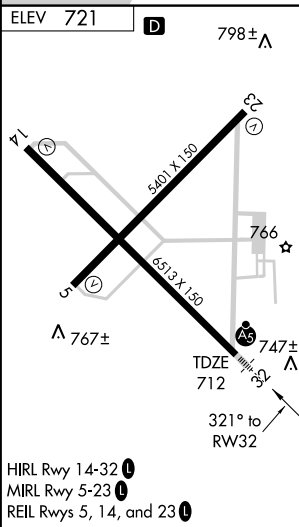
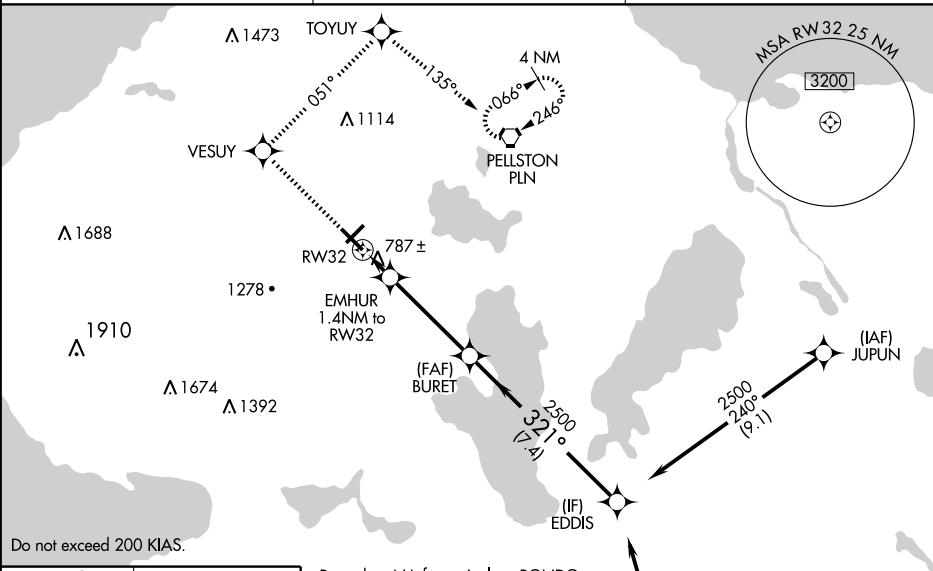


MISSED APPROACH: Climb to 2600 direct VESUY and via track 051° to TOYUY and via track 135° to PLN VORTAC and hold.

ASOS
119.025

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
123.0 (CTAF) 0



PELLSTON, MICHIGAN
Orig 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)
45°34'N - 84°48'W

RNAV (GPS) RWY 32

VORTAC PLN
111.8
 Chan **55**

APP CRS
063°

Rwy Idg **5395**
 TDZE **716**
 Apt Elev **721**

VOR/DME RWY 5
 PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

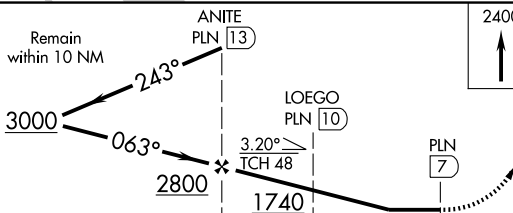
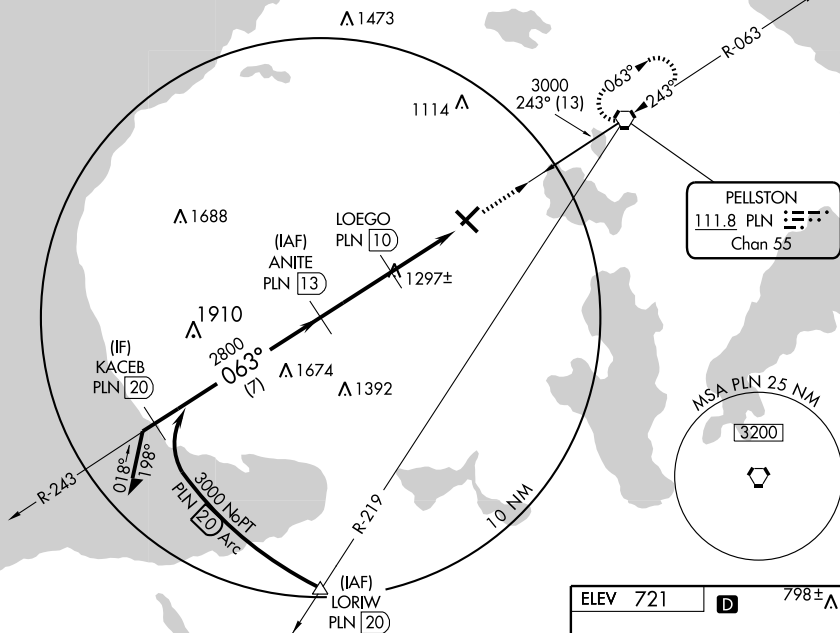
When local altimeter setting not received, use Harbor Springs altimeter setting and increase all MDA 40 feet, increase S-5 Cat A/C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2400 direct PLN VORTAC and hold.

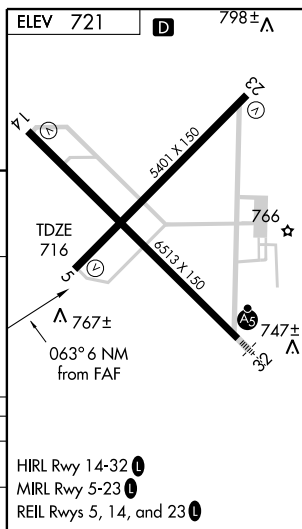
ASOS
119.025

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
123.0 (CTAF) **0**



CATEGORY	A	B	C	D
S-5	1560-1 844 (900-1)	1560-1 ¼ 844 (900-1 ¼)	1560-2 ½ 844 (900-2 ½)	1560-2 ¾ 844 (900-2 ¾)
CIRCLING	1560-1 839 (900-1)	1560-1 ¼ 839 (900-1 ¼)	1560-2 ½ 839 (900-2 ½)	1560-2 ¾ 839 (900-2 ¾)



PHURN N42°50.58' W82°35.80'. NOTAM FILE PHN.
NDB (LOM) 332 PH 043° 5.1 NM to St Clair Co Intl.

DETROIT

PIKLE N45°43.36' W87°13.49' NOTAM FILE ESC.
NDB (LOM) 344 ES 087° 5.5 NM to Delta Co.

PINCONNING

GROSS (52I) 3 W UTC-5(-4DT) N43°50.81' W84°00.68'

DETROIT

615 NOTAM FILE LAN

RWY 09-27: 2565X100 (TURF) LIRL

RWY 09: Trees. **RWY 27:** Thld dsplcd 442'. Road.

AIRPORT REMARKS: Attended phone req—call 517-879-9915. Fuel avbl emerg only. For snow removal call 989-708-7583. Buildings in primary surface east end, 70' N; 93' S of centerline; also 4' fence along rwy edge, first 140', S side; +15'-45' trees 95' S of centerline west end. Rwy 09-27 marked with 3' yellow cones.

ACTIVATE LIRL Rwy 09-27—CTAF.

COMMUNICATIONS: CTAF 122.9

PLAINWELL MUNI (61D) 2 N UTC-5(-4DT) N42°28.07' W85°38.88'

CHICAGO

722 S4 **FUEL** 100LL NOTAM FILE LAN

RWY 09-27: H2650X50 (ASPH) LIRL

RWY 09: Thld dsplcd 191'. Expressway. **RWY 27:** Thld dsplcd 775'. Trees.

RWY 01-19: 2550X150 (TURF)

RWY 01: Thld dsplcd 268'. Tree. **RWY 19:** Thld dsplcd 980'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 09-27 sfc extensive cracking. For LIRL Rwy 09-27 key 122.8 five times on. Rwy 01-19 and dsplcd thlds marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

PLYMOUTH

CANTON-PLYMOUTH-METTETAL (1D2) 2 S UTC-5(-4DT) N42°20.89' W83°27.38'

DETROIT

696 B S4 **FUEL** 100LL TPA-1696(1000) NOTAM FILE LAN

RWY 18-36: H2303X75 (ASPH-GRVD) S-12.5 MIRL 0.5% up N

RWY 18: PAPI(P2L)—GA 4.0° TCH 25'. Road.

RWY 36: PAPI(P4R)—GA 3.0° TCH 25'. Trees.

AIRPORT REMARKS: Attended 1300Z±dusk. Fuel 24 hour self serve.

Noise sensitive areas N and S of arpt. Ctc arpt manager

734-459-0012 for noise abatement procedures. ACTIVATE MIRL

Rwy 18-36, PAPI Rwy 18 and Rwy 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

® DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

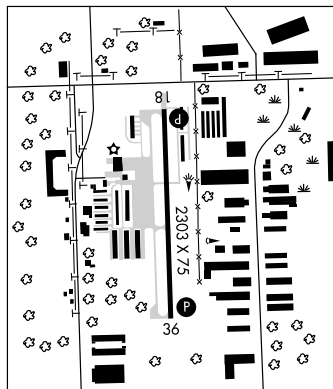
SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 124° 7.1 NM to fld. 950/3W.

COPTER

L-281, A

IAP



PONDEROSA HELIPORT (See HIGHLAND)

PONTIAC N42°42.05' W83°31.97' NOTAM FILE PTK.

DETROIT

(L) **VORTAC** 111.0 PSI Chan 47 116° 5.4 NM to Oakland Co Intl. 1148/3W.

VOR unusable 170°-210°.

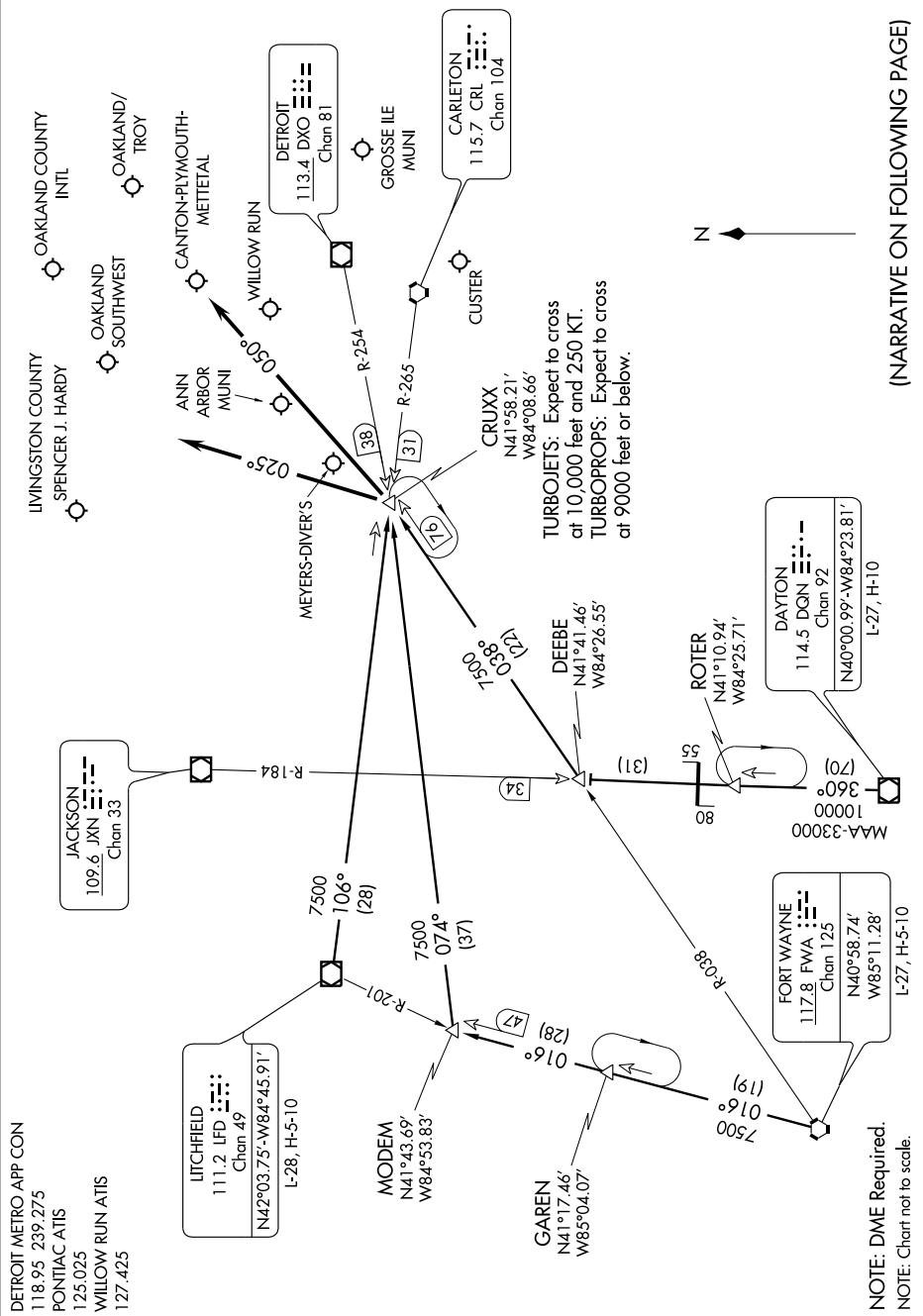
RCO 122.15R 111.0T (LANSING RADIO)

L-281, A

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

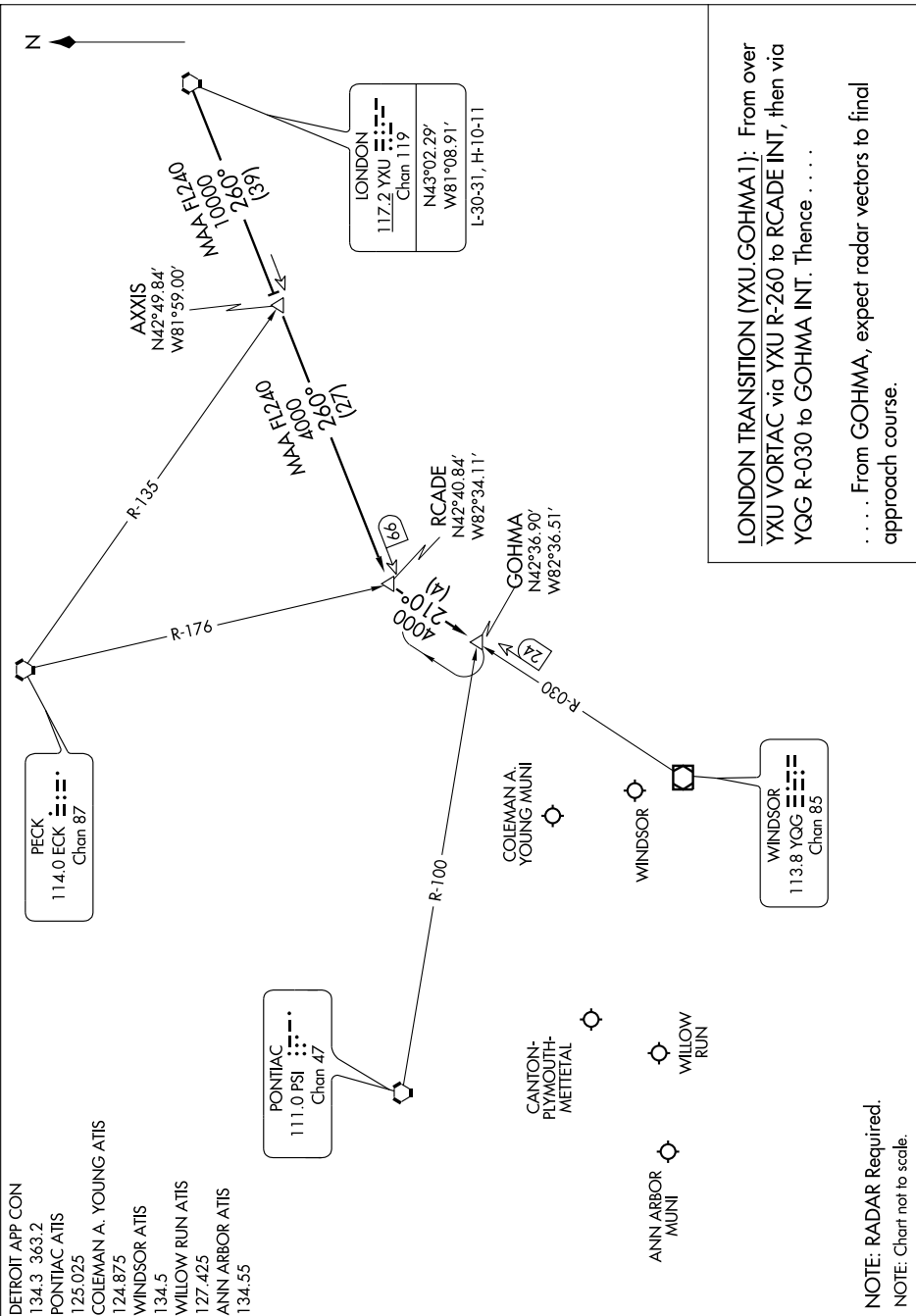
. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



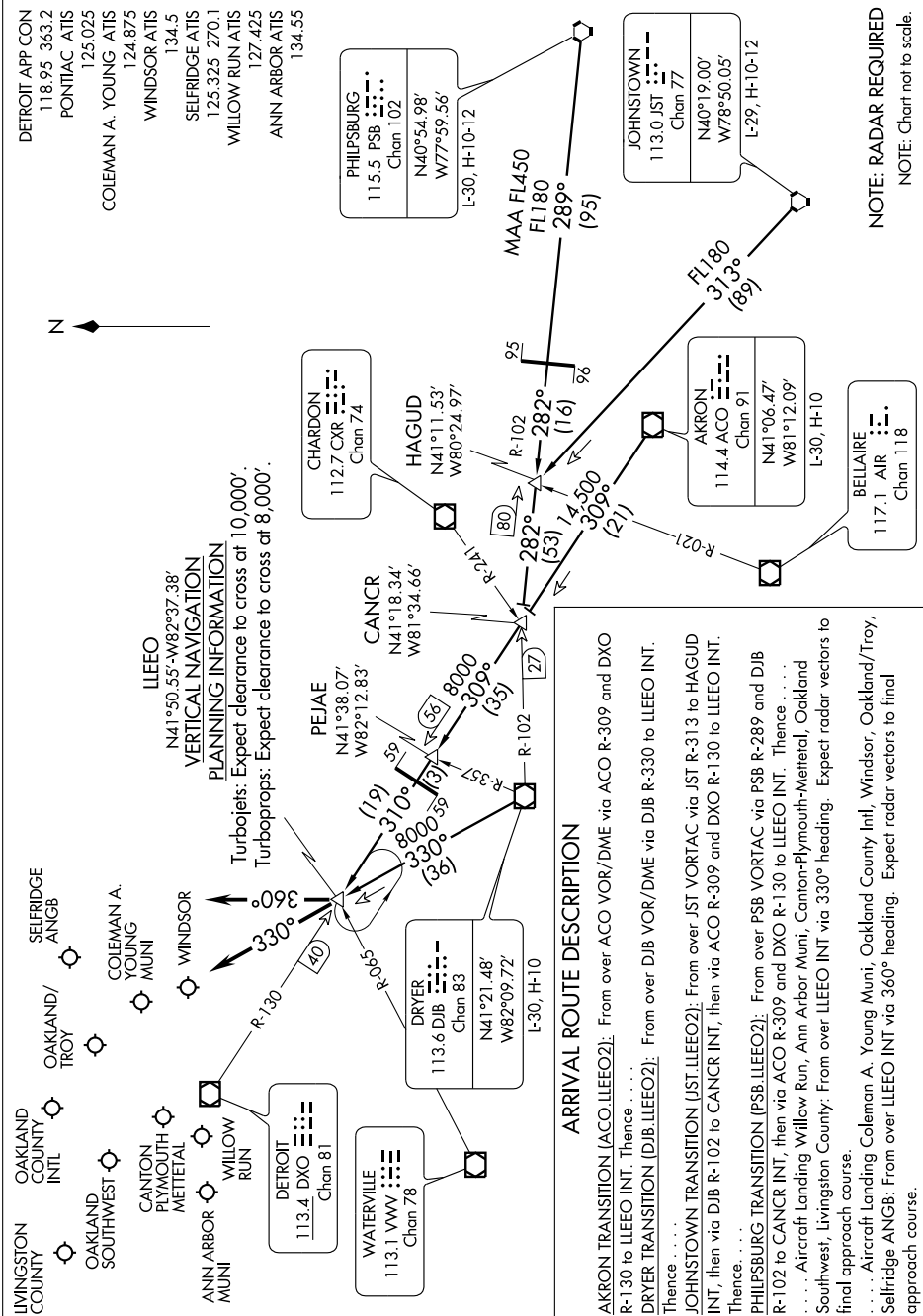
EC-1 26 AUG 2010 to 23 SEP 2010

NOTE: Chart not to scale.

GOHMA ONE ARRIVAL
(GOHMA.GOHMA1) 09351

DETROIT, MICHIGAN

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

APP CRS
183°Rwy Idg **2303**
TDZE **696**
Apt Elev **696****RNAV (GPS) RWY 18**

PLYMOUTH / CANTON-PLYMOUTH-METTETAL (1D2)

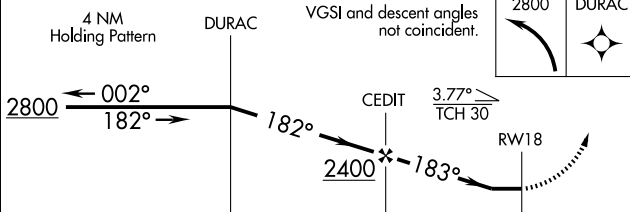
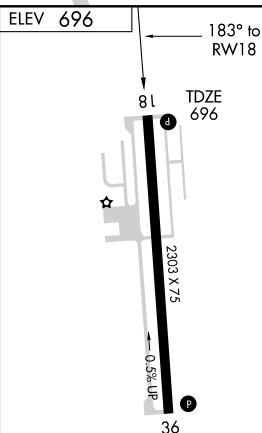
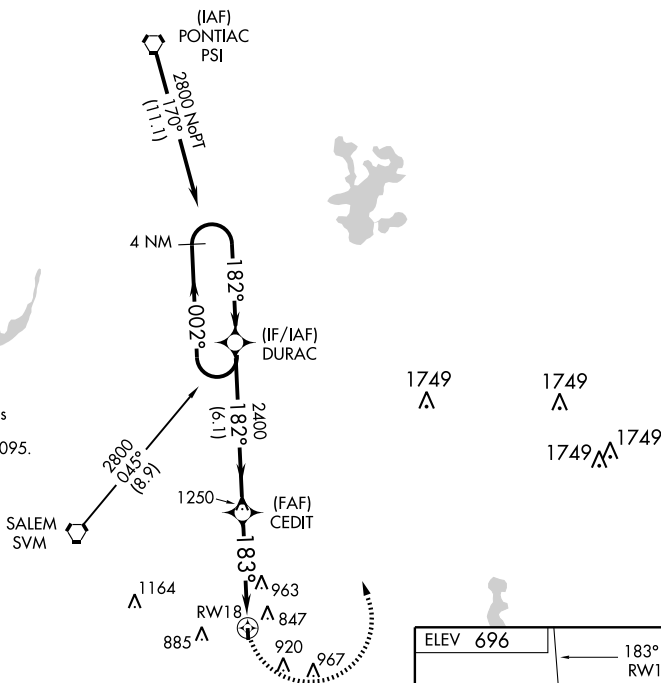
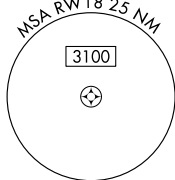


Use Willow Run altimeter setting; if not received, use Detroit Metropolitan Wayne County altimeter setting. Visibility reduction by helicopters NA. Circling NA at night. DME/DME RNP-0.3 NA.

MISSED APPROACH:
Climbing left turn to 2800
direct DURAC and hold.

DETROIT APP CON
118.95 363.2UNICOM
122.7 (CTAF) 0

Procedure NA for arrivals
at SVM VORTAC via
airway radials 349 CW 095.



CATEGORY	A	B	C	D
LNAV MDA	1300-1 604 (700-1)		NA	
CIRCLING	1300-1 604 (700-1)		NA	

MIRL Rwy 18-36 0

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

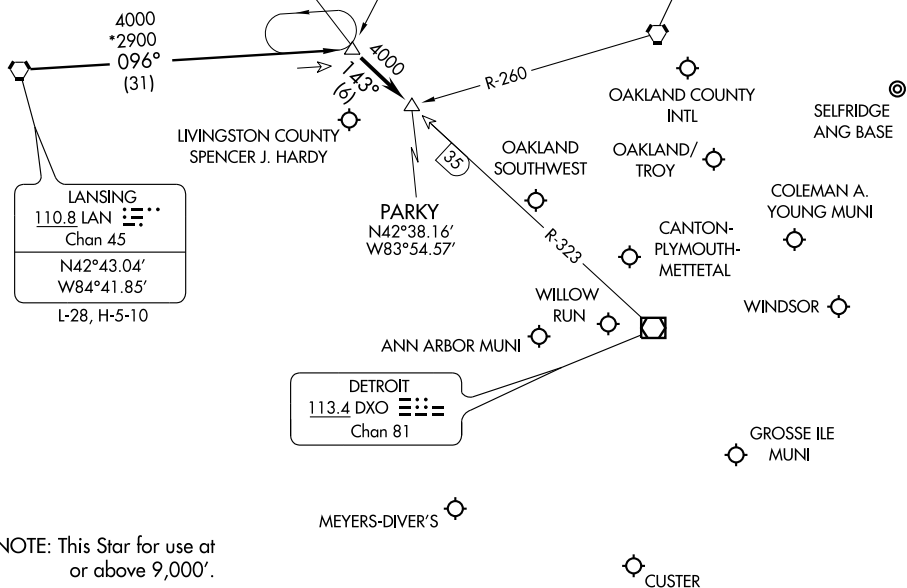
SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at
9000'.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . .

. . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . .

. . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

SVM VORTAC 114.3 Chan 90	APP CRS 124°	Rwy Idg TDZE Apt Elev	N/A N/A 696
--	------------------------	-----------------------------	--

VOR-A

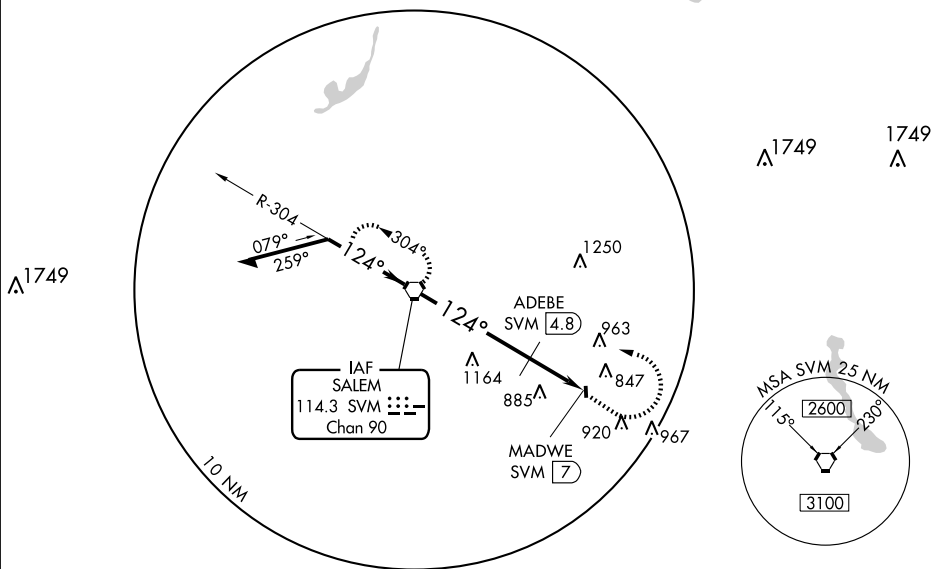
PLYMOUTH / CANTON-PLYMOUTH-METTETAL (1D2)

▼ Use Willow Run altimeter setting; if not received,
 ▲ NA use Detroit Metropolitan Wayne County altimeter setting.
 Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1800 then climbing
 left turn to 2400 direct SVM VORTAC and hold.

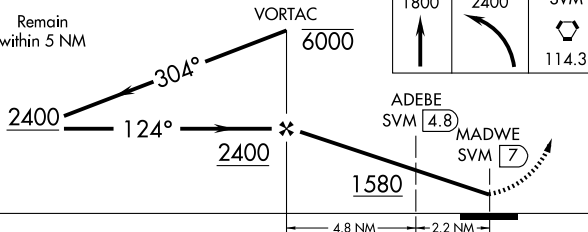
DETROIT APP CON
118.95 363.2

UNICOM
122.7 (CTAF) 0



ELEV 696

Remain
 within 5 NM



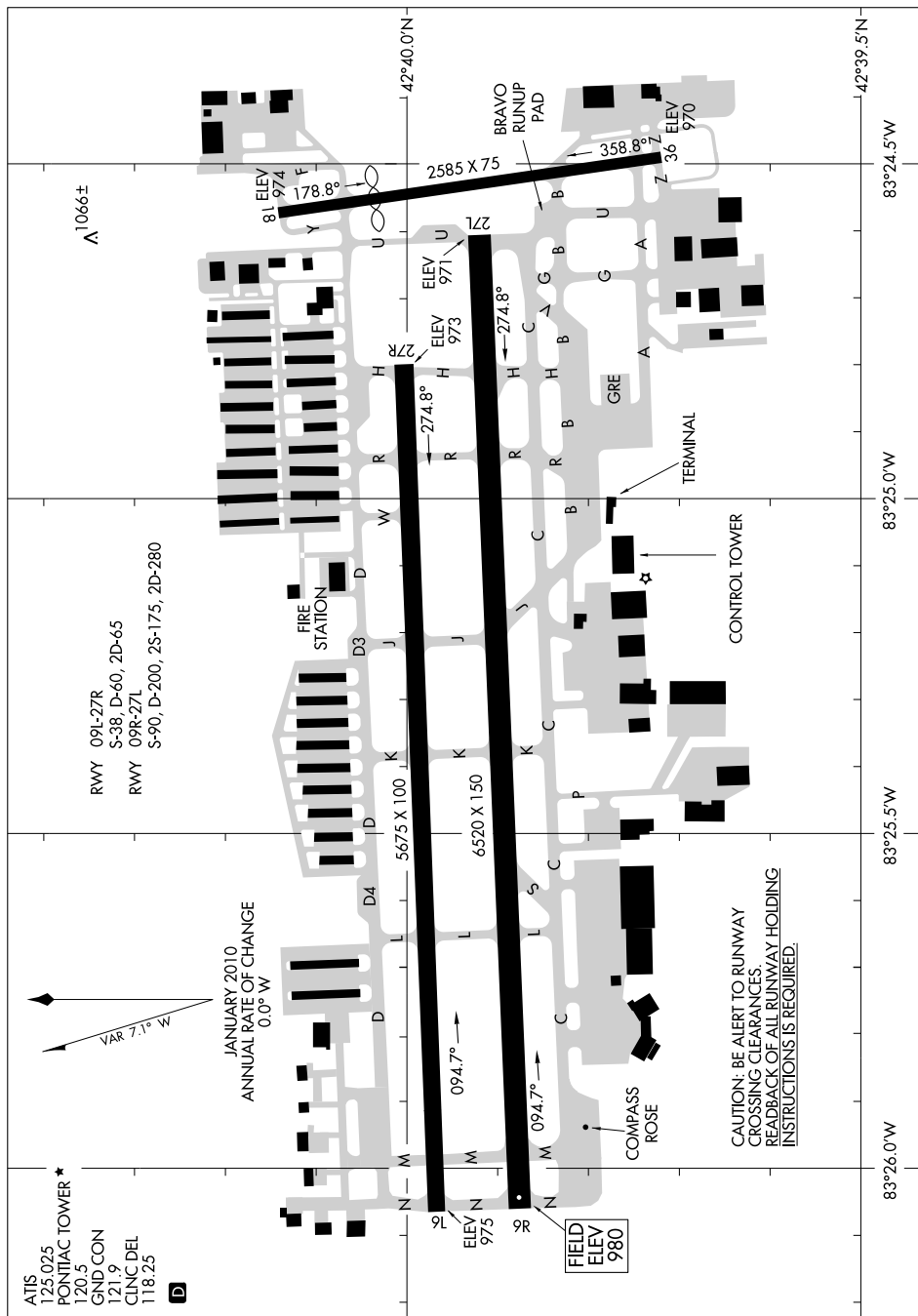
124° 7 NM from FAF



MRL Rwy 18-36 0

CATEGORY	A	B	C	D
CIRCLING	1580-1¼ 884 (900-1¼)	NA		
ADEBE FIX MINIMUMS				
CIRCLING	1220 - 1 524 (600-1)	NA		

FAF to MAP 7 NM					
Knots	60	90	120	150	180
Min:Sec	7:02	4:41	3:31	2:49	2:21



PONTIAC

OAKLAND CO INTL (PTK) 5 W UTC-5(-4DT) N42°39.94' W83°25.23'

980 B S4 **FUEL** 100LL, JET A OX 1 LRA Class IV, ARFF Index A NOTAM FILE PTK

RWY 09R-27L: H6520X150 (ASPH-PFC) S-90, D-200, 2S-175, 2D-280 HIRL

RWY 09R: MALSR. PAPI (P4R)—GA 3.0° TCH 45'.

RWY 27L: REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

RWY 09L-27R: H5675X100 (ASPH-PFC) S-38, D-60, 2D-65

MIRL

RWY 09L: REIL. PAPI(P4L).

RWY 27R: REIL. PAPI(P4L)—GA 3.0° TCH 51'.

RWY 18-36: H2585X75 (ASPH)

RWY 18: PAPI(P2L)—GA 3.0°. Thld dsplcd 650'.

RWY 36: PAPI(P2L)—GA 3.0°.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09L: TORA-5675 TODA-5675 ASDA-5675 LDA-5675

RWY 09R: TORA-6520 TODA-6520 ASDA-6520 LDA-6520

RWY 27L: TORA-6520 TODA-6520 ASDA-6520 LDA-6520

RWY 27R: TORA-5675 TODA-5675 ASDA-5675 LDA-5675

AIRPORT REMARKS: Attended continuously. Air carrier ops with more than 30 passenger seats req PPR call arpt manager 248-666-3900. Seaplane Idgs and tkfs on Lake Angelus 4.5 miles ENE is prohibited by local ordinances. Birds and deer on and invof arpt. Control twr unable to see more than 200' S of Rwy 35 thld and Twy G between Twy A and Twy B. Twy H and Twy U unlighted north of Rwy 09R-27L. Rwy 18 PAPI OTS indef. ACTIVATE MALSR Rwy 09R, PAPI Rwy 09R—CTAF. ACTIVATE PAPI Rwy 09L, REIL Rwy 27R, PAPI Rwy 27R, and VASI Rwy 27L ctc twr. Ldg fee for acft over 12500 lbs. US Customs user fee arpt. Contact U.S. Customs 1200-0100Z† Mon-Fri on 248-666-7717; other times minimum 3 hrs advance notification on 734-942-9000.

WEATHER DATA SOURCES: ASOS (248) 666-1818.

COMMUNICATIONS: CTAF 120.5 ATIS 125.025

UNICOM 122.95

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

® **DETROIT APP/DEP CON** 127.5

PONTIAC TOWER 120.5 123.7 (1100-0500Z†) **GND CON** 121.9 121.65 **CLNC DEL** 118.25

AIRSPACE: CLASS D svc 1100-0500Z† other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05' W83°31.97' 116° 5.4 NM to fld. 1148/3W.

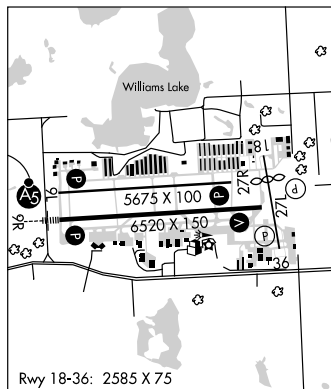
ILS 111.1 I-PTK Rwy 09R. Class IE. Unmonitored when twr clsd. LOC BC unusable byd 14 NM blo 3300'.

DETROIT

COPTER

H-10G, L-28J, A

IAP, AD



AKRON TWO DEPARTURE

SL-5052 (FAA)

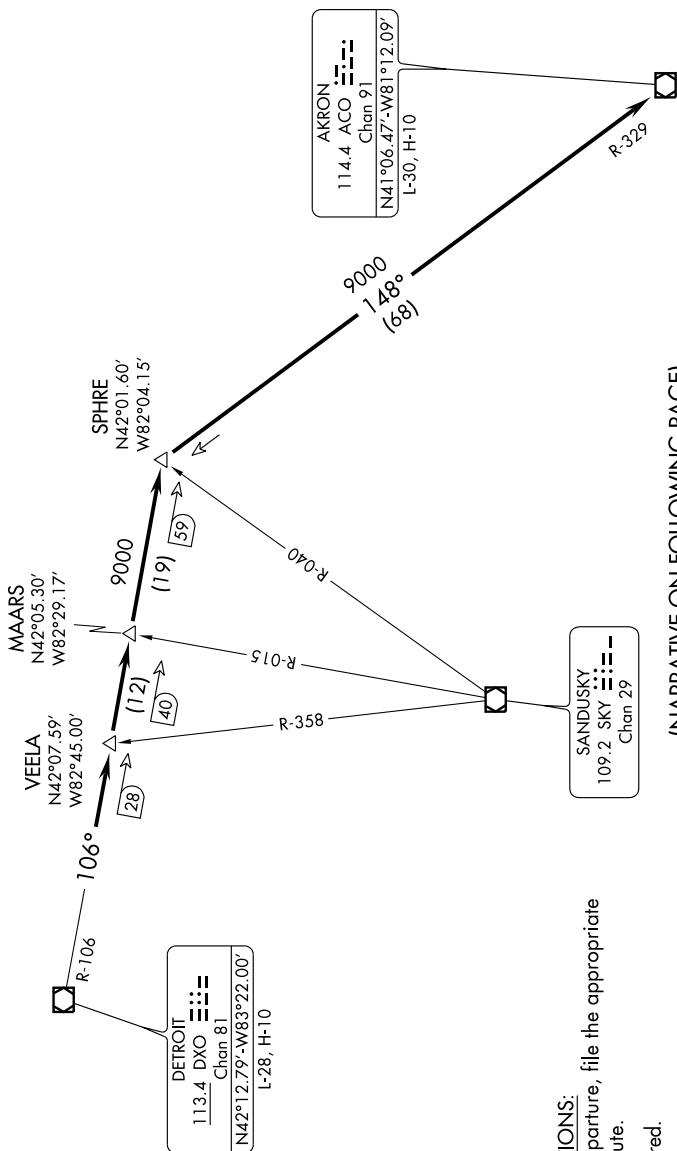
PONTIAC/ OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

ATIS 125.025	
CLNC DEL	
118.25	
GND CON	
121.9	
PONTIAC TOWER ★	120.5
DETROIT DEP CON	
127.5 239.275	
CTAF	120.5

TAKE-OFF MINIMUMS

Rwys 17, 35: NA - Environmental.
Rwys 9L, 9R, 27L, 27R: STANDARD.



(NARRATIVE ON FOLLOWING PAGE)

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.

NOTE: Radar Required.

NOTE: Chart not to scale.

AKRON TWO DEPARTURE

(ACO2.ACO) 09127

PONTIAC, MICHIGAN

PONTIAC/OAKLAND COUNTY INTL (PTK)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R and 27L/R: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 9R: Multiple Trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.

Ant on Hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple Trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.

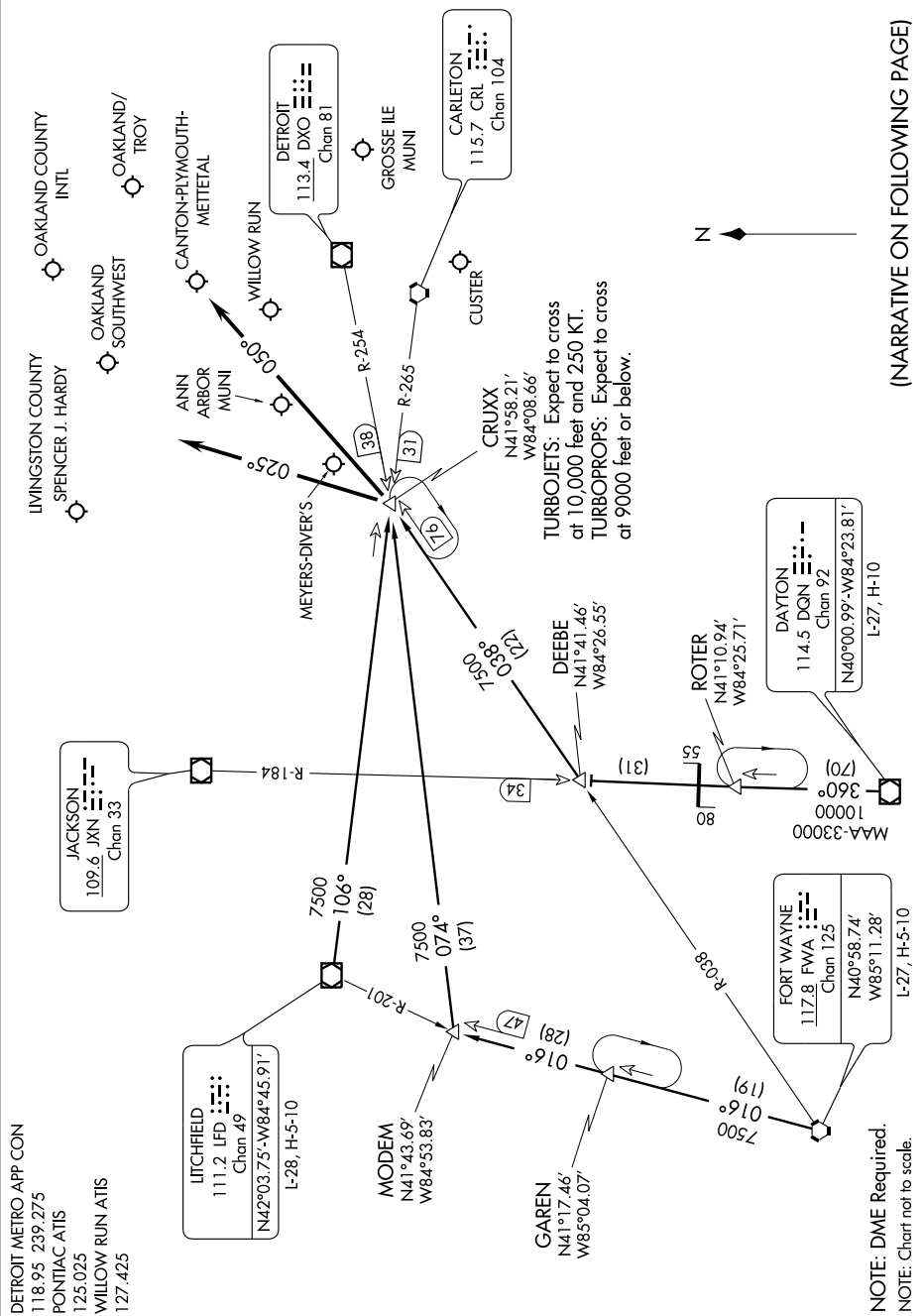
Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041 MSL'.

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, OMI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

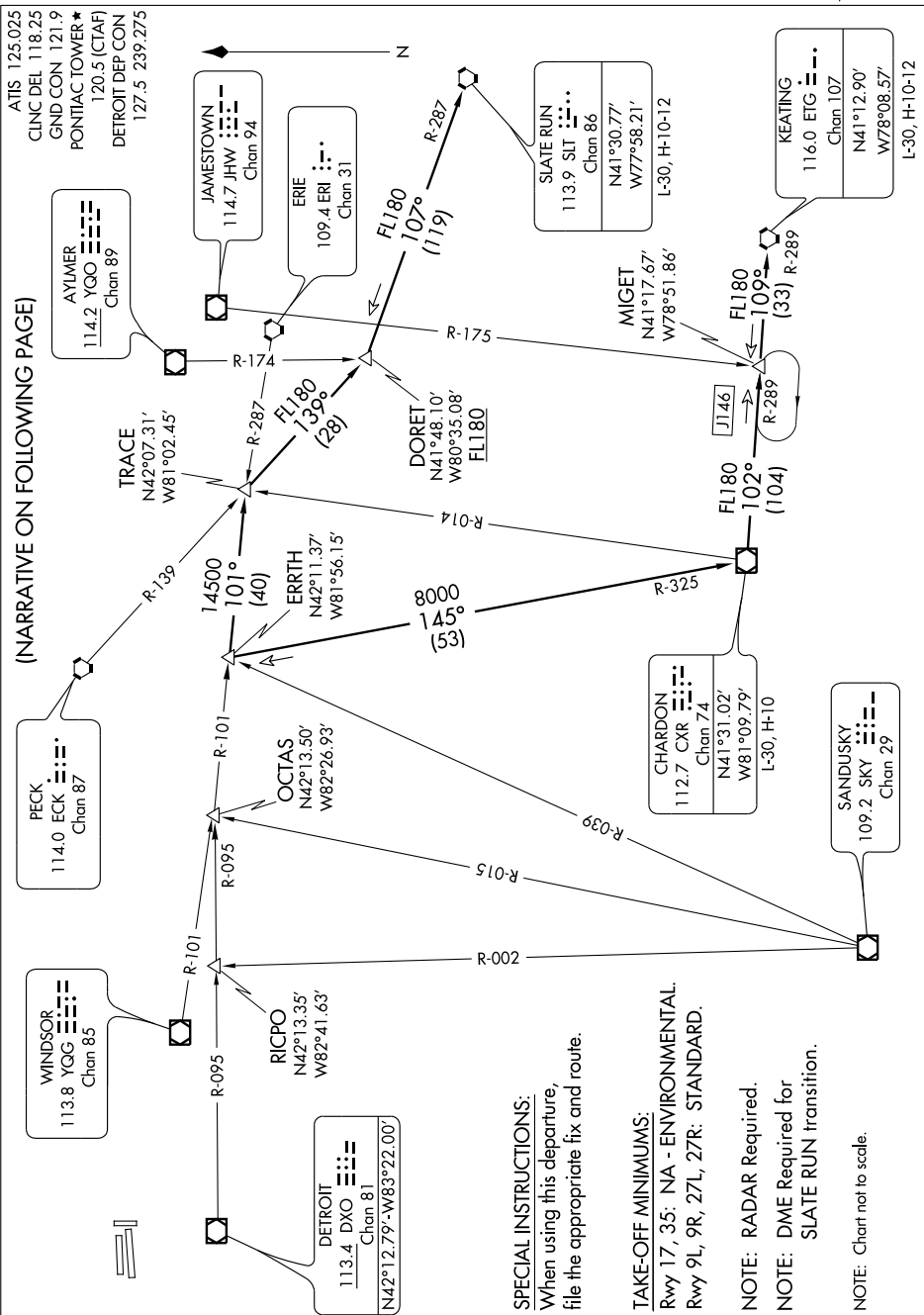
SL-5052 (FAA)

PONTIAC/ OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

(NARRATIVE ON FOLLOWING PAGE)



EC-1. 26 AUG 2010 to 23 SEP 2010

ERRTH TWO DEPARTURE

(ERRTH2.ERRTH) 09127

PONTIAC, MICHIGAN
PONTIAC/ OAKLAND COUNTY INTL (PTK)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R and 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

FORT WAYNE THREE DEPARTURE

PONTIAC/ OAKLAND COUNTY INTL (PTK)
SL-5052 (FAA) PONTIAC, MICHIGAN

ATIS 125.025

CLNC DEL

118.25

GND CON

121.9

PONTIAC TOWER ★

120.5 (CTAF)

DETROIT DEP CON

127.5 239.275

SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

DETROIT
113.4 DXO
Chan 81
N42°12.79'-W83°22.00'
L-28, H-10



FORT WAYNE
117.8 FWA
Chan 125
N40°58.74'-W85°11.28'
L-27, H-5-10

ILLIE
N41°14.91'
W84°07.96'

WATERVILLE
113.1 VWV
Chan 78

FINDLAY
108.2 FDY
Chan 19

TAKE-OFF MINIMUMS

Rwys 9L, 9R, 27L, 27R: STANDARD.

Rwys 17, 35: NA - Environmental.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

FORT WAYNE THREE DEPARTURE

(FWA3.FWA) 09127

PONTIAC, MICHIGAN
PONTIAC/ OAKLAND COUNTY INTL (PTK)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.
Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.
- Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.
Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.
- Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

LOC I-PTK 111.1	APP CRS 092°	Rwy Idg TDZE Apt Elev	6520 980 980
---------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 9R

PONTIAC/OAKLAND COUNTY INTL (PTK)

- ▼ *RVR 1800 authorized with the use of FD or AP or HUD to DA.
When local altimeter setting not received, use Coleman A. Young Muni
altimeter setting and increase DA 105 feet and all MDA 120 feet,
increase S-LOC 9R Cats C and D visibility ½ mile, circling Cat B visibility
¼ mile, Cats C and D visibility ½ mile.

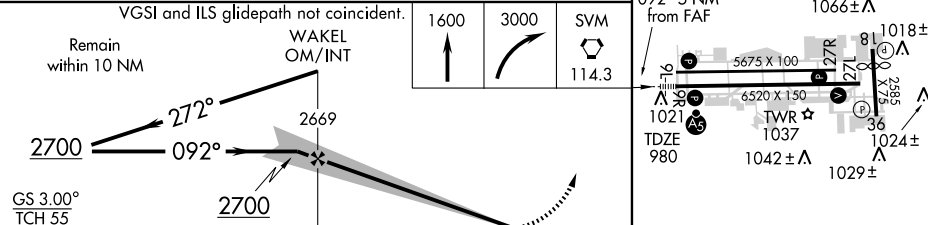
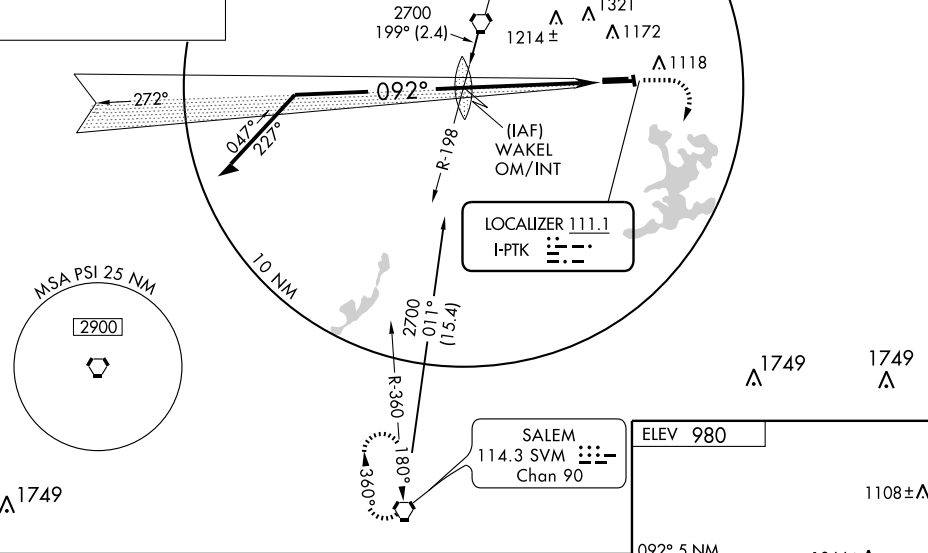
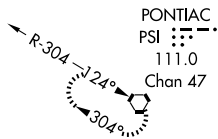
MALSR



MISSED APPROACH: Climb to 1600,
then climbing right turn to 3000 direct
SVM VORTAC and hold.

ATIS 125.025	DETROIT APP CON 127.5 363.2	PONTIAC TOWER ★ 120.5 (CTAF)	GND CON 121.9	CLNC DEL 118.25	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------

ALTERNATE
MISSED APCH FIX



CATEGORY	A	B	C	D
S-ILS 9R	*1180/24		200 (200-½)	
S-LOC 9R	1620/24	640 (700-½)	1620/60 640 (700-1¼)	1620-1½ 640 (700-1½)
CIRCLING	1620-1	640 (700-1)	1620-1¾ 640 (700-1¾)	1640-2 660 (700-2)

HIRL Rwy 9R-27L

MIRL Rwy 9L-27R

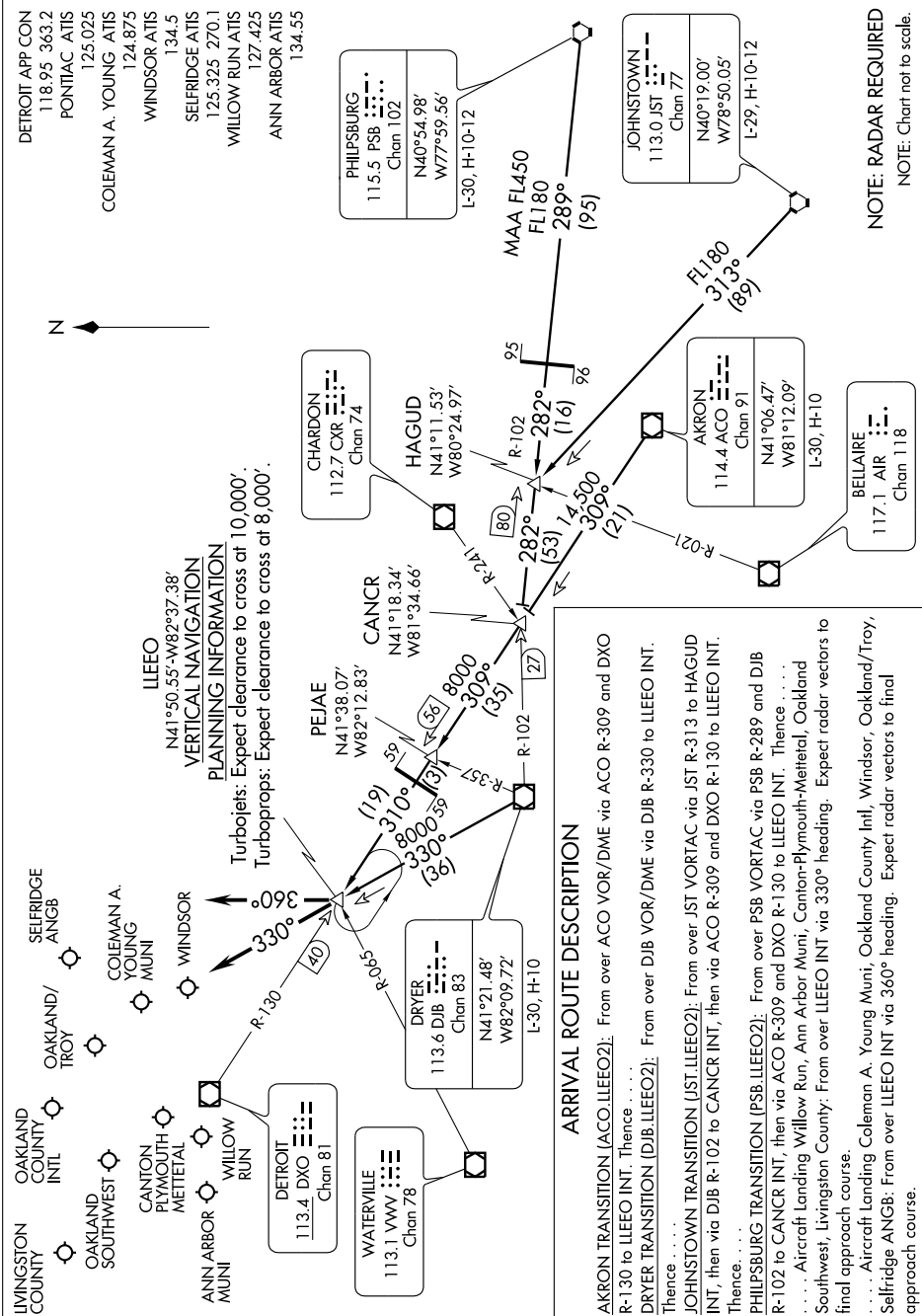
REIL Rwy 9L and 27L

REIL Rwy 27R

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

LOC I-PTK
111.1

APP CRS
272°

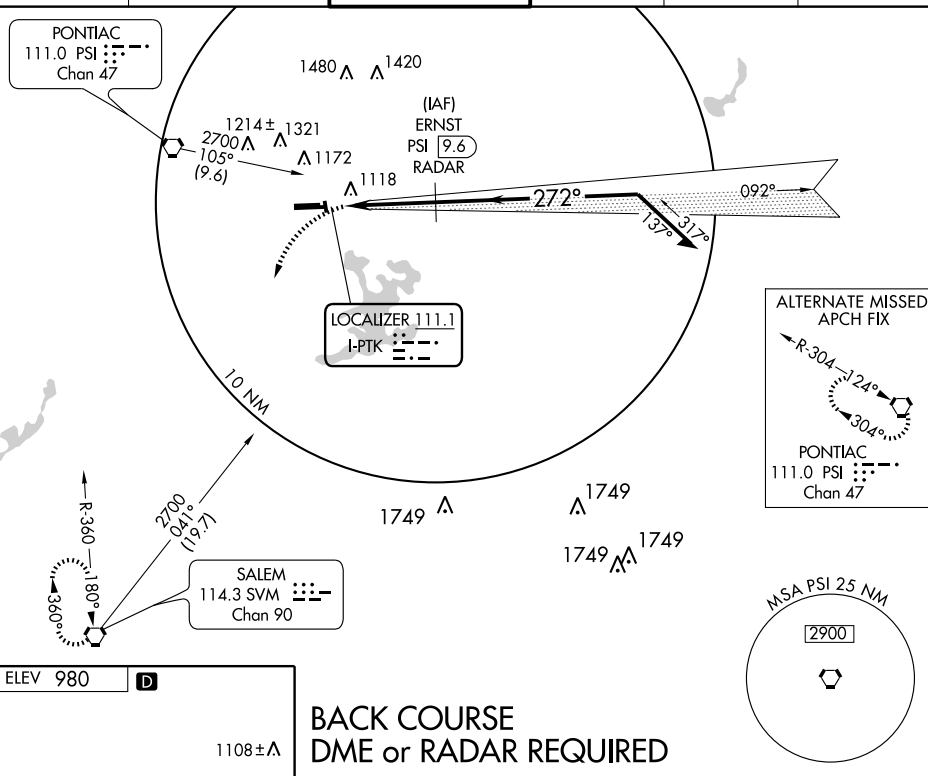
Rwy Idg **6520**
TDZE **974**
Apt Elev **980**

LOC BC RWY 27L
PONTIAC/OAKLAND COUNTY INTL (PTK)

When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all MDA 120 feet, increase S-27L Cat C/D visibility ¼ mile and Circling Cat C/D visibility ½ mile.

MISSED APPROACH: Climbing left turn to 3000 direct SVM VORTAC and hold.

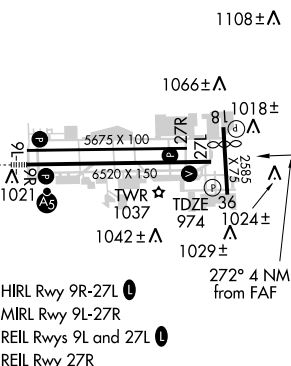
ATIS 125.025	DETROIT APP CON 127.5 363.2	PONTIAC TOWER ★ 120.5 (CTAF)	GND CON 121.9	CLNC DEL 118.25	UNICOM 122.95
------------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------



ELEV 980

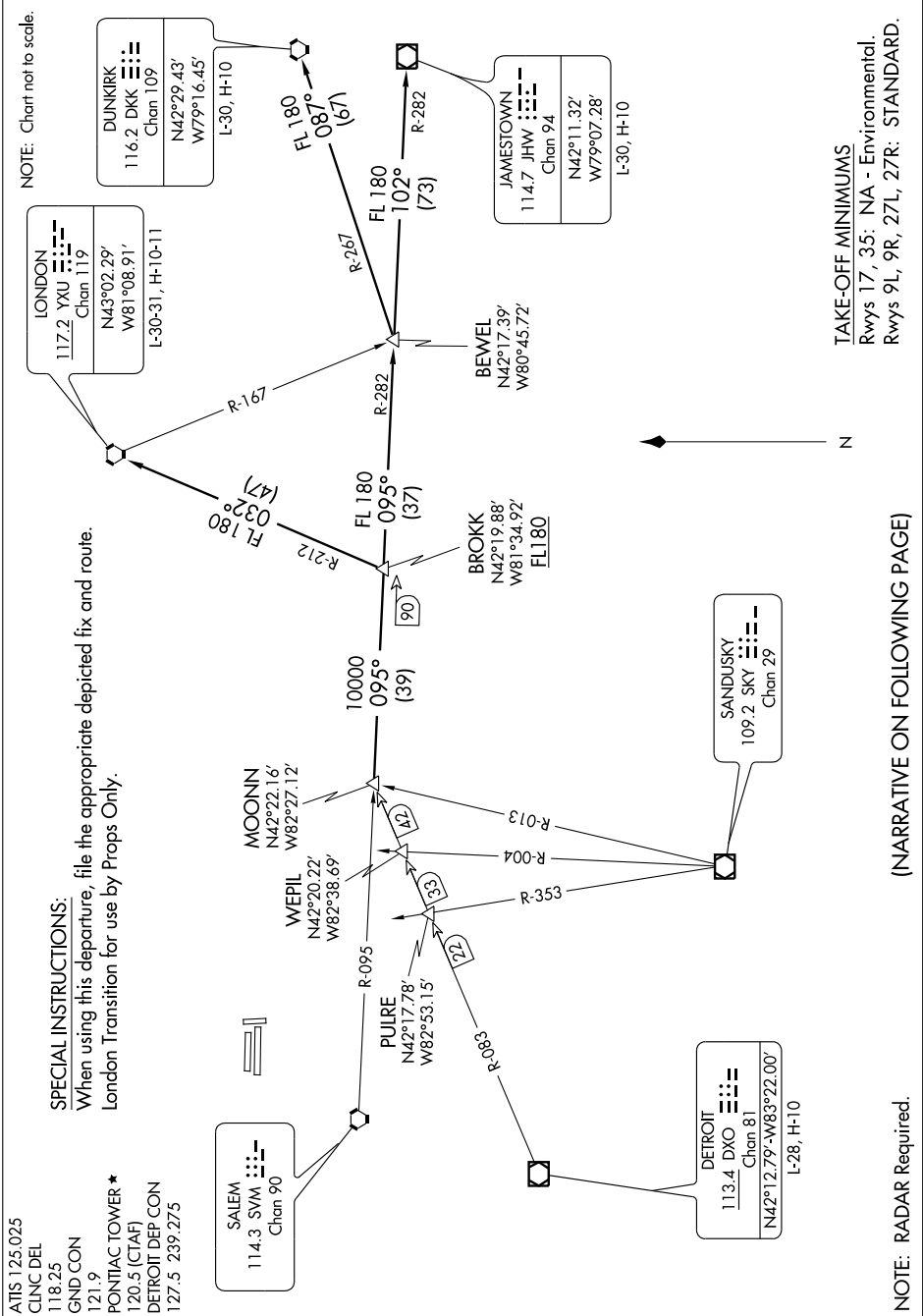


BACK COURSE
DME or RADAR REQUIRED



Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06

CATEGORY	A	B	C	D
S-27L	1420-1	446 (500-1)	1420-1½ 446 (500-1½)	1420-1½ 446 (500-1½)
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1½ 580 (600-1½)	1640-2 660 (700-2)





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R:

Climb via assigned heading for radar vectors to join the assigned SID.
Maintain 3000 feet, expect clearance to filed altitude/ flight level
ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via
SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to
BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via
SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to
BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via
SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline,
up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of
centerline, 36' AGL/1006' MSL.
- Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline,
up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline,
71' AGL/1041' MSL.
- Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

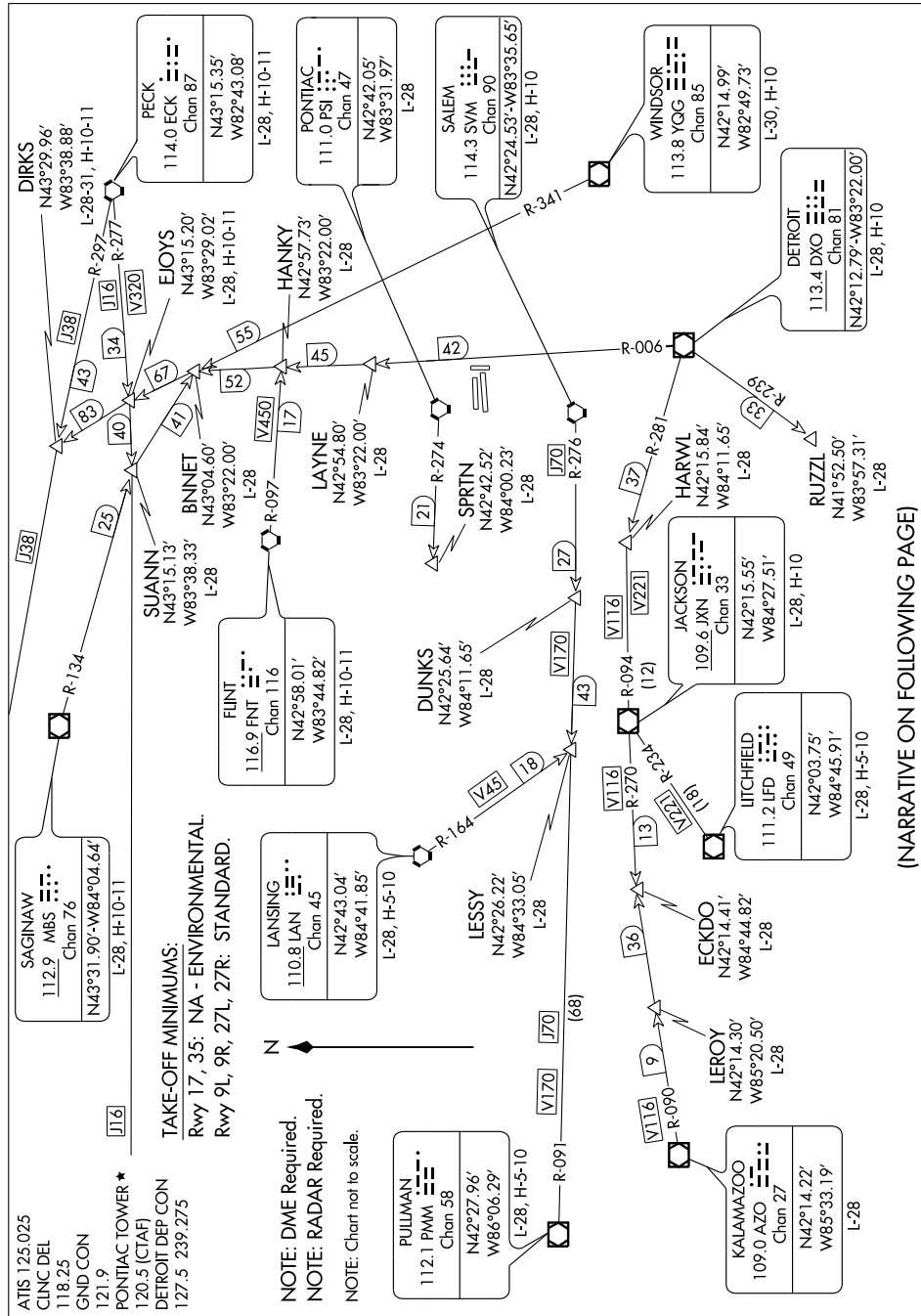
PALACE THREE DEPARTURE

SL-5052 (FAA)

PONTIAC/ OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 26 AUG 2010 to 23 SEP 2010

PALACE THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) at 10,000 feet or below, file via SPRTN. Aircraft landing/overflying Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

(RID4.RID) 09127

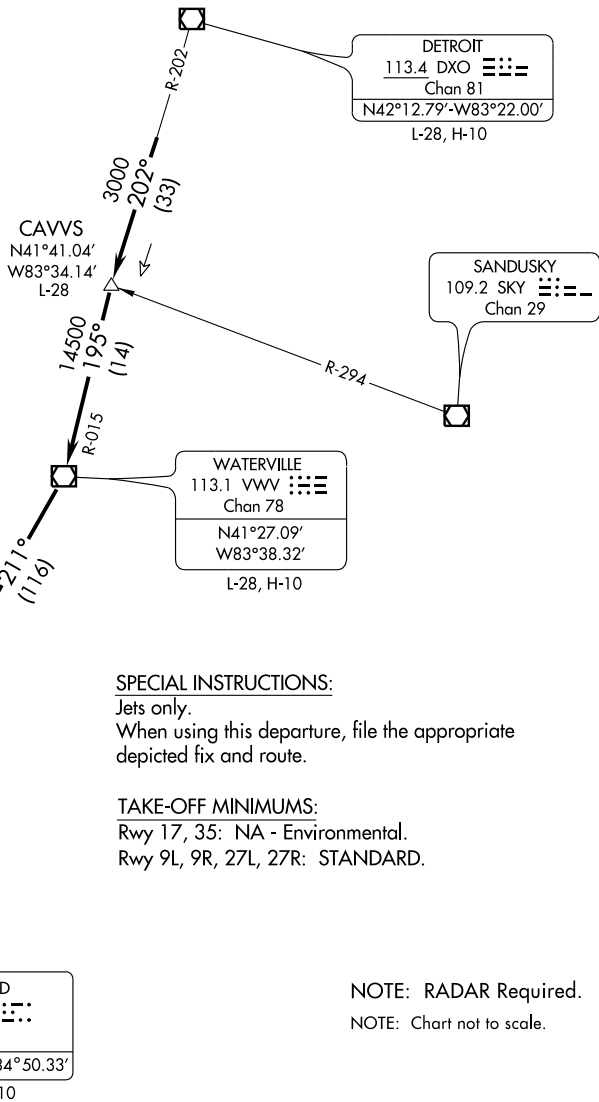
RICHMOND FOUR DEPARTURE

SL-5052 (FAA)

PONTIAC/OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

ATIS 125.025
CLNC DEL
118.25
GND CON
121.9
PONTIAC TOWER ★
120.5 (CTAF)
DETROIT DEP CON
127.5 239.275



(NARRATIVE ON FOLLOWING PAGE)

RICHMOND FOUR DEPARTURE

(RID4.RID) 09127

PONTIAC, MICHIGAN

PONTIAC/OAKLAND COUNTY INTL (PTK)

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R:

Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC.

Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.
Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.
Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

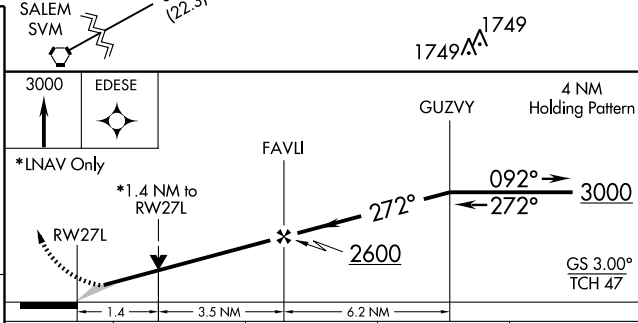
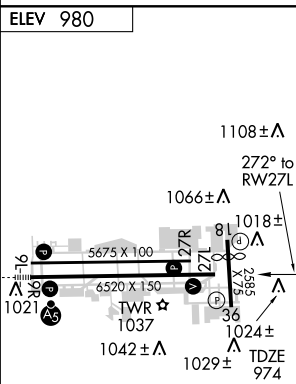
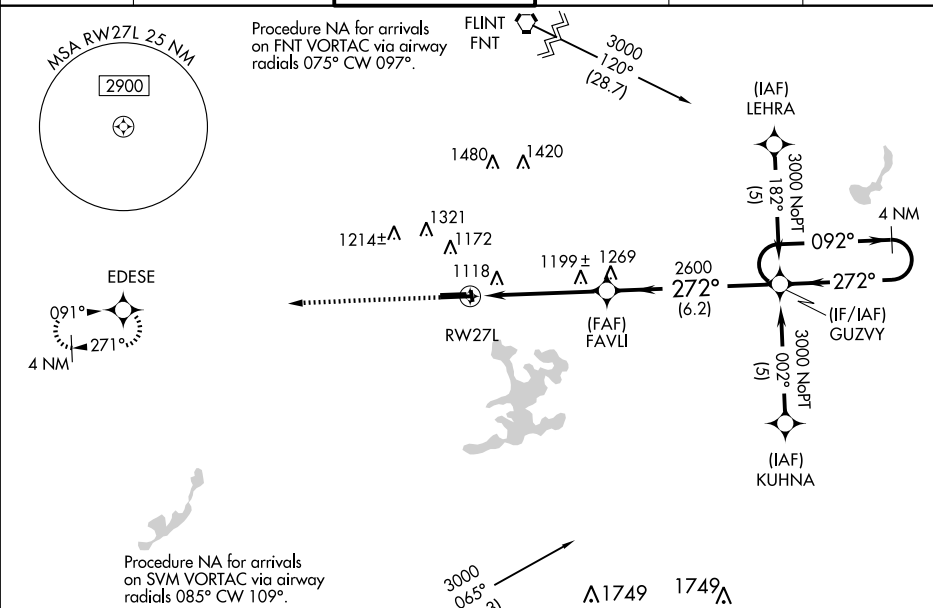
WAAS CH 70615 W27A	APP CRS 272°	Rwy Idg TDZE Apt Elev	6520 974 980
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 27L

PONTIAC/OAKLAND COUNTY INTL (PTK)

<p>▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).</p> <p>▲ DME/DME RNP-0.3 NA. When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C/D, and Circling Cat C/D visibility ½ mile.</p> <p>Baro-VNAV and VDP NA when using Coleman A. Young Muni altimeter setting.</p>	<p>MISSED APPROACH: Climb to 3000 direct EDESE and hold.</p>
---	--

ATIS 125.025	DETROIT APP CON 127.5 363.2	PONTIAC TOWER ★ 120.5 (CTAF) AS	GND CON 121.9	CLNC DEL 118.25	UNICOM 122.95 0
------------------------	---------------------------------------	--	-------------------------	---------------------------	----------------------------------

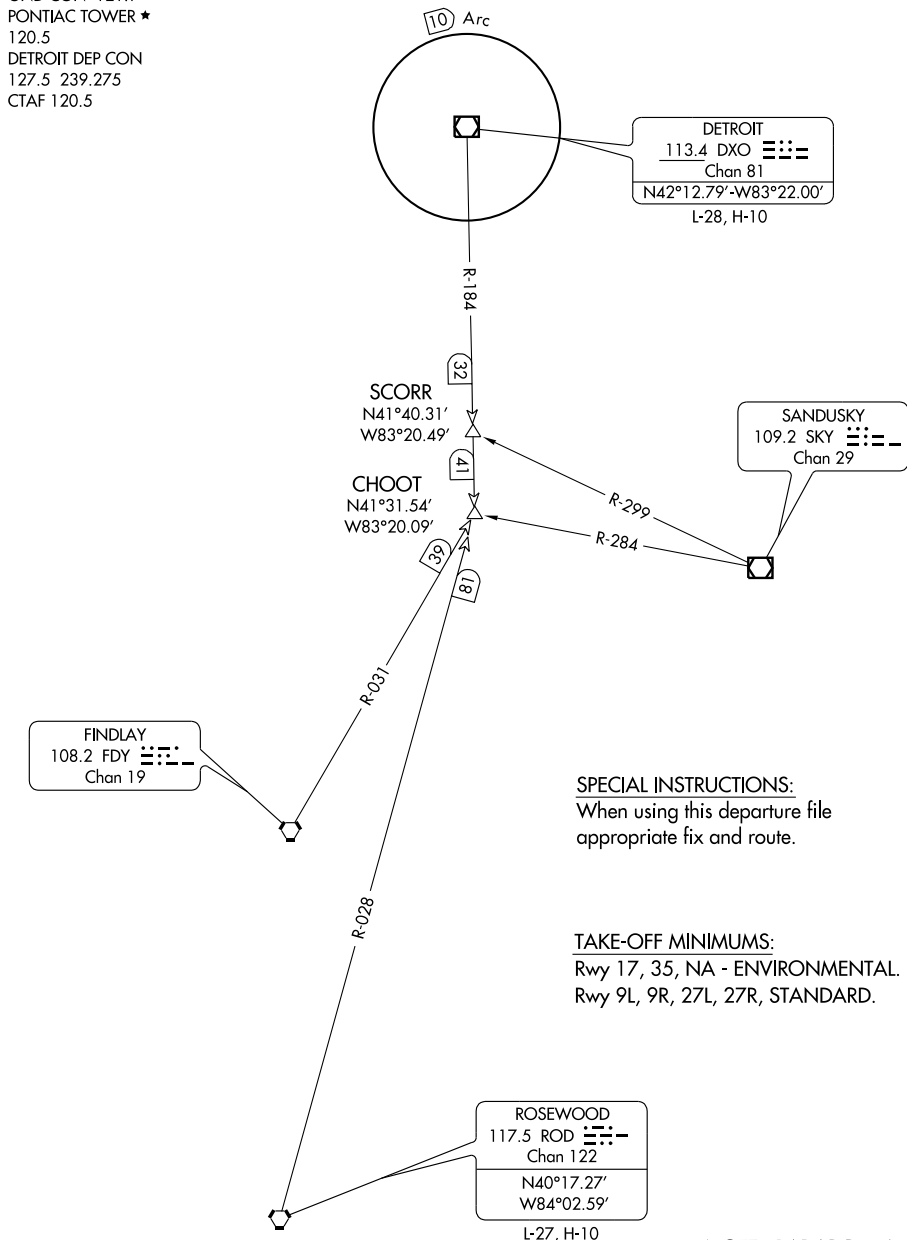


CATEGORY	A	B	C	D
LPV DA	1174-3 $\frac{3}{4}$ 200 (200-3 $\frac{3}{4}$)			
LNAV/VNAV DA	1463-1 $\frac{3}{4}$ 489 (500-1 $\frac{3}{4}$)			
LNAV MDA	1460-1	486 (500-1)	1460-1 $\frac{1}{4}$ 486 (500-1 $\frac{1}{4}$)	1460-1 $\frac{1}{2}$ 486 (500-1 $\frac{1}{2}$)
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1 $\frac{1}{2}$ 580 (600-1 $\frac{1}{2}$)	1640-2 660 (700-2)

ATIS 125.025
 CLNC DEL 118.25
 GND CON 121.9
 PONTIAC TOWER ★
 120.5
 DETROIT DEP CON
 127.5 239.275
 CTAF 120.5



(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

ROSEWOOD TWO DEPARTURE SL-5052 (FAA)

PONTIAC, MICHIGAN



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

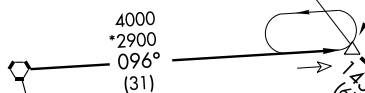
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDY

PARKY

N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT

113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFRIAGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTETALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

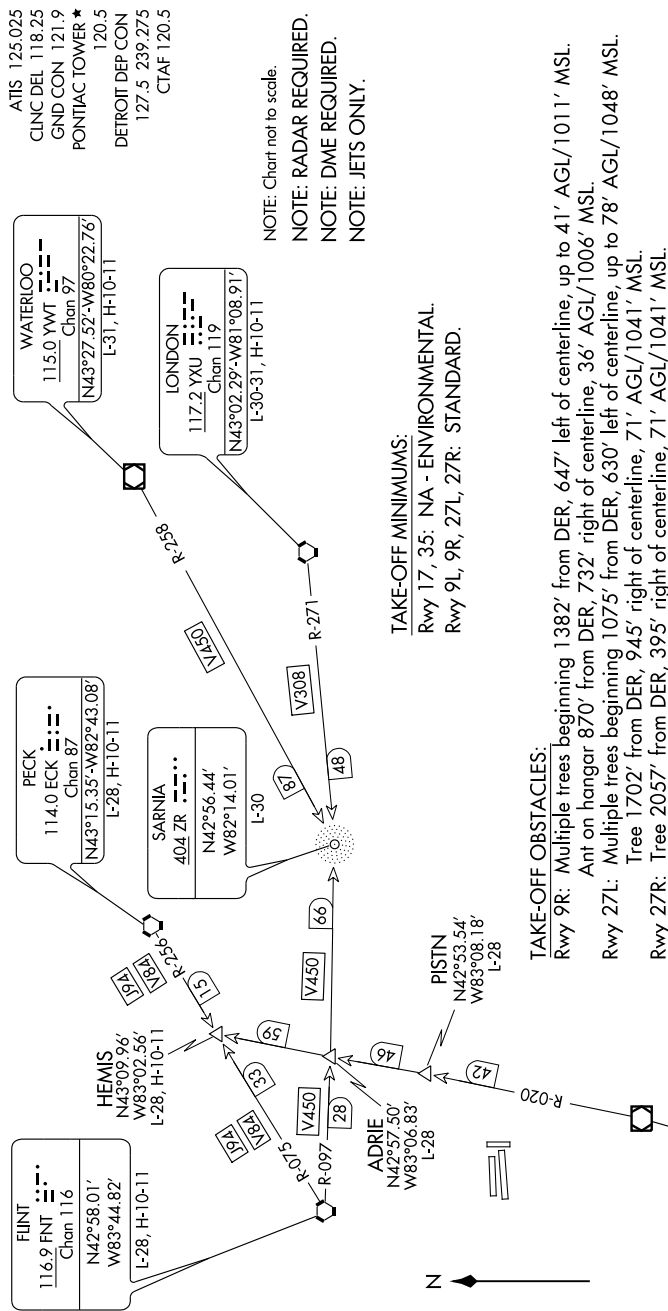
LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210



NOTE: Chart not to scale.
NOTE: RADAR REQUIRED.
NOTE: DME REQUIRED.
NOTE: JETS ONLY.

TAKE-OFF MINIMUMS:

Rwy 17, 35: NA - ENVIRONMENTAL.
Rwy 9L, 9R, 27L, 27R: STANDARD.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.

Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.

Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

SPECIAL INSTRUCTIONS: When using this departure file appropriate fix and route.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

SWWAN ONE ARRIVAL

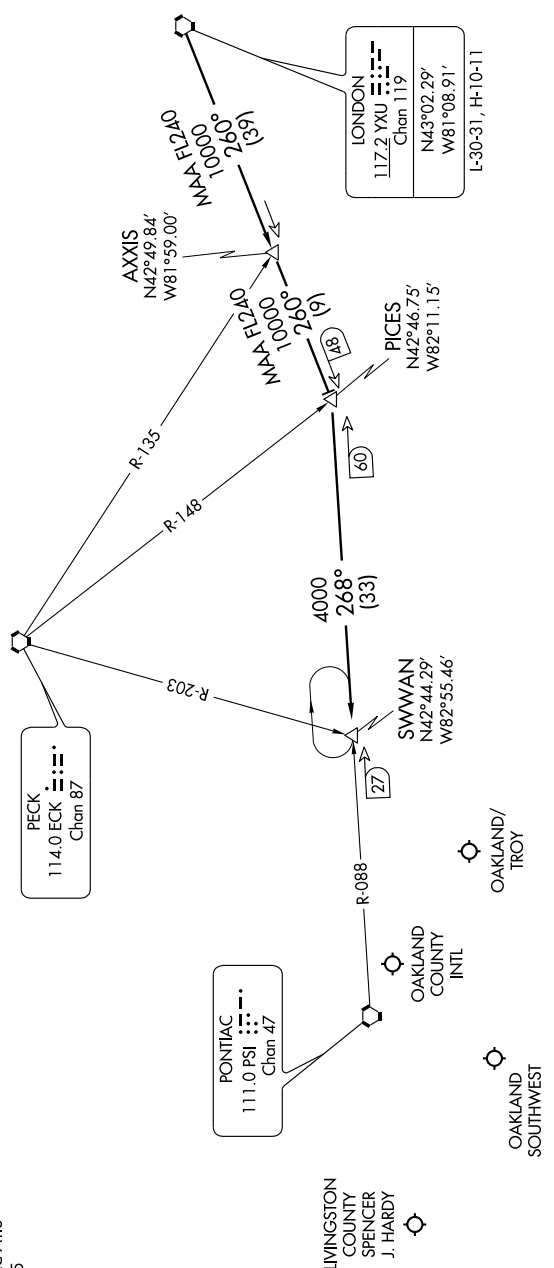
DETROIT APP CON
127.5 363.2
PONTIAC ATIS
125.025

SWWAN ONE ARRIVAL

(SWWAN.SWWAN1) 10042

ST-5052 (FAA)

PONTIAC, MICHIGAN



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.
NOTE: Chart not to scale.

PONTIAC, MICHIGAN

VORTAC PSI
111.0
Chan 47

APP CRS
119°

Rwy Idg
TDZE 6520
Apt Elev 980

VOR RWY 9R

PONTIAC/OAKLAND COUNTY INTL (PTK)

▼ Inoperative table does not apply. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all MDA 120 feet, increase S-9R Cat C/D and Circling Cat C visibility ¼ mile and Circling Cat D visibility ½ mile. Inoperative table does not apply, when using Coleman A. Young Muni altimeter setting.



MALSR
MISSED APPROACH:
Climbing right turn to
3000 direct SVM
VORTAC and hold.

ATIS
125.025

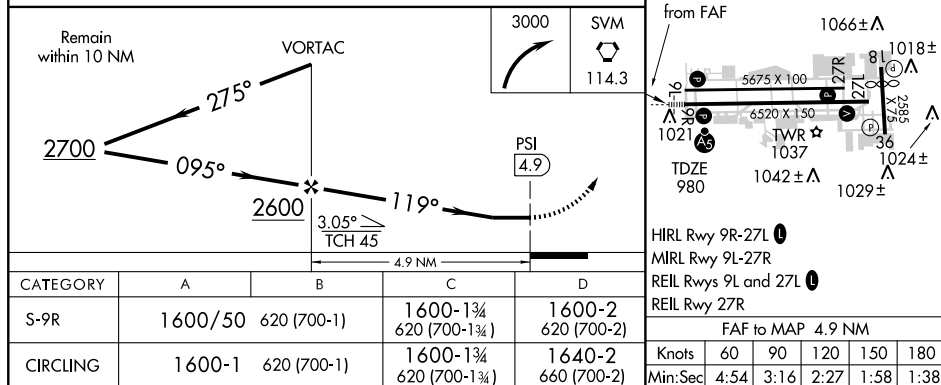
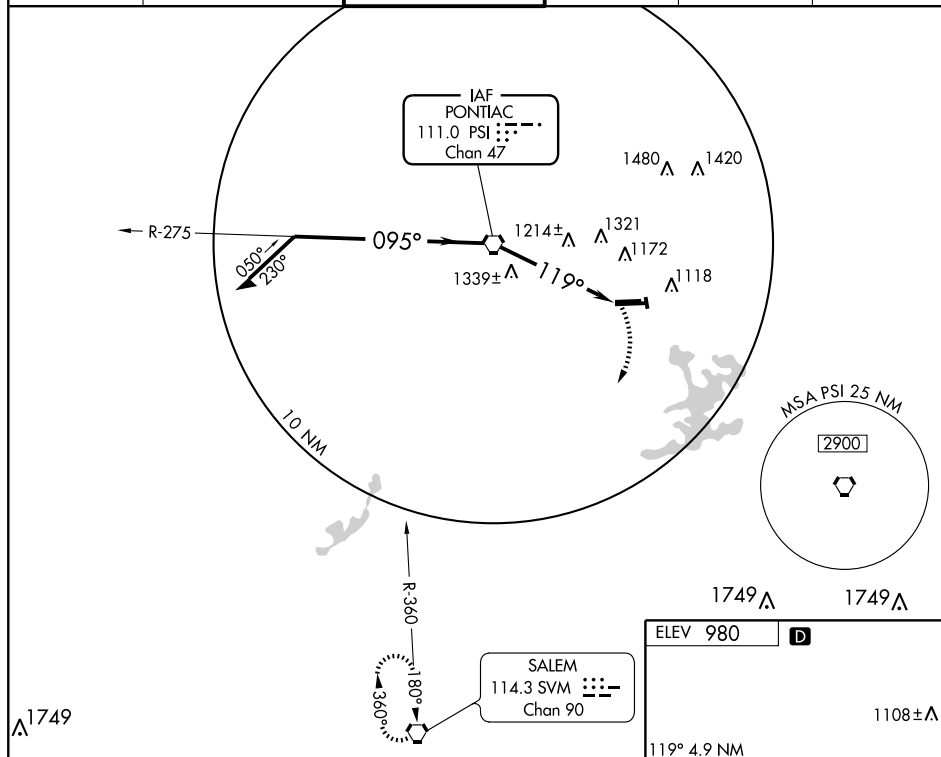
DETROIT APP CON
127.5 363.2

PONTIAC TOWER ★
120.5 (CTAF)

GND CON
121.9

CLNC DEL
118.25

UNICOM
122.95



VORTAC PSI 111.0 Chan 47	APP CRS 294°	Rwy Idg 6520 TDZE 974 Apt Elev 980
--	------------------------	---

VOR RWY 27L
PONTIAC/OAKLAND COUNTY INTL (PTK)

T Visibility reduction by helicopters NA. When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all MDA 120 feet, increase S-27L Cat C/D and Circling Cat C/D visibility ½ mile.

MISSED APPROACH: Climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS
125.025

DETROIT APP CON
127.5 363.2

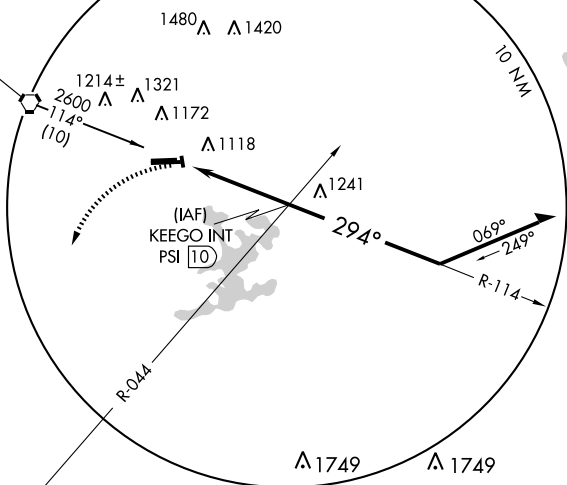
PONTIAC TOWER ★
120.5 (CTAF) 


GND CON
121.9

CLNC DEB
118,25

UNICOM
122.95 L

PONTIAC
111.0 PSI
Chan 47



SALEM
114.3 SVM 
Chan 90

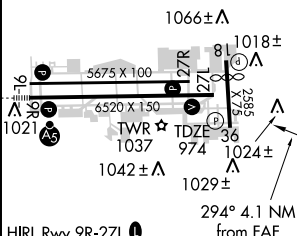
MSA PSI 25 NM

2900

ELEV 980

D



1108 ± Δ



MIRL Rwy 9L-27R
REIL Rwy 9L and 27L
REIL Rwy 27R

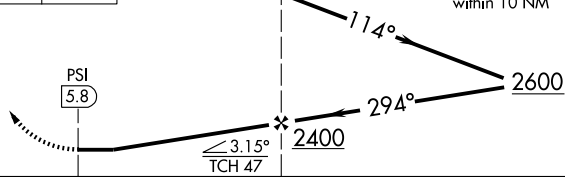
FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

3000	SVM
	
	114.3

KEEGO INT
PSI 10

Remain
within 10 NM



CATEGORY	A	B	C	D
S-27L	1460-1	486 (500-1)	1460-1¼ 486 (500-1¼)	1460-1½ 486 (500-1½)
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1½ 580 (600-1½)	1640-2 660 (700-2)

PONTIAC, MICHIGAN
Amdt 15 22OCT09

PONTIAC/OAKLAND COUNTY INTL (PTK)

42°40'N - 83°25'W

VOR RWY 27L

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

PORT HURON

ST CLAIR CO INTL (PHN) 5 SW UTC-5(-4DT) N42°54.66' W82°31.73'

DETROIT

650 B S4 FUEL 100LL, JET A TPA-1650 (1000) LRA NOTAM FILE PHN

H-10G, 11A, L-30F

RWY 04-22: H5104X100 (ASPH-GRVD) S-40, D-55, 2D-90 HIRL

IAP

RWY 04: MALSR. PAPI(P4L)—GA 3.0° TCH 31'. Trees.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 10-28: H4000X75 (ASPH) S-16 MIRL

RWY 10: REIL. PAPI (P4L). GA 3.0° TCH 25'. Trees.

RWY 28: REIL. PAPI (P4L). GA 3.5° TCH 31'. Trees.

AIRPORT REMARKS: Attended 1300Z†—dusk. Arpt unattended Easter; Thanksgiving and Christmas. Deer and gulls on and invof arpt. Rwy 10 REIL OTS indef. Rwy 28 REIL OTS indef. HIRL Rwy 04-22 and MIRL Rwy 10-28 preset on low ints; to increase ints and ACTIVATE REIL Rwy 22; 10 and 28 and MALSR Rwy 04—CTAF. Ldg fee for commercial and corporate acft. Trans Atlantic flights will have to notify U.S. Customs at 810-985-9541 one hr prior to entry into the U.S. Notify U.S. Dept of Agriculture at 810-985-6126 and arpt manager at 810-364-6890 24 hrs in advance for disposal of acft international trash. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: AWOS-3 118.375 (810) 364-7787.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ SELFDEGR APP/DEP CON 119.6 (1230-0400Z†) clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35' W82°43.08' 165° 22.3 NM to fld. 810/7W. HIWAS.

PHURN NDB (LOM) 332 PH N42°50.57' W82°35.80' 043° 5.1 NM to fld.

ILS 110.9 I-PHN Rwy 04. LOM PHURN NDB.



PRESQUE ISLE CO (See ROGERS CITY)

PRICES (See LINDEN)

PRICKETT-GROOMS FLD (See SIDNAW)

PULLMAN N42°27.96' W86°06.29' NOTAM FILE LAN.

CHICAGO

(H) VOR/DME 112.1 PMM Chan 58 072° 13.0 NM to Padgham Fld. 640/00E.

H-5E, 10F, L-28I

VOR/DME unusable 080°-068°

DME unusable byd 30 NM blo 3000'.

RCO 122.1R 112.1T (LANSING RADIO)

RAETHER (See HOWELL)

RANDOLPH'S LANDING AREA (See ST JOHNS)

RAY COMMUNITY (57D) 2 SE UTC-5(-4DT) N42°44.21' W82°53.33'

DETROIT

632 B S4 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 09-27: H2494X60 (ASPH) MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 27: PAPI(P2L). Thld dsplcd 210'. Trees.

RWY 18-36: 2187X123 (ASPH-TURF)

RWY 18: Thld dsplcd 140'. Trees.

RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Ultralight ops. Rwy 18-36 asph peeling and cracking. Rwy 18-36 north 900' asph, asph 28' wide. Rwy 18-36 marked with cones. ACTIVATE rotating bcn, MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

LOC I-PHN	APP CRS	Rwy Idg	5104
<u>110.9</u>	043°	TDZE	648
		Apt Elev	650

ILS or LOC RWY 4

PORT HURON / ST. CLAIR COUNTY INTL (PHN)



MALSR

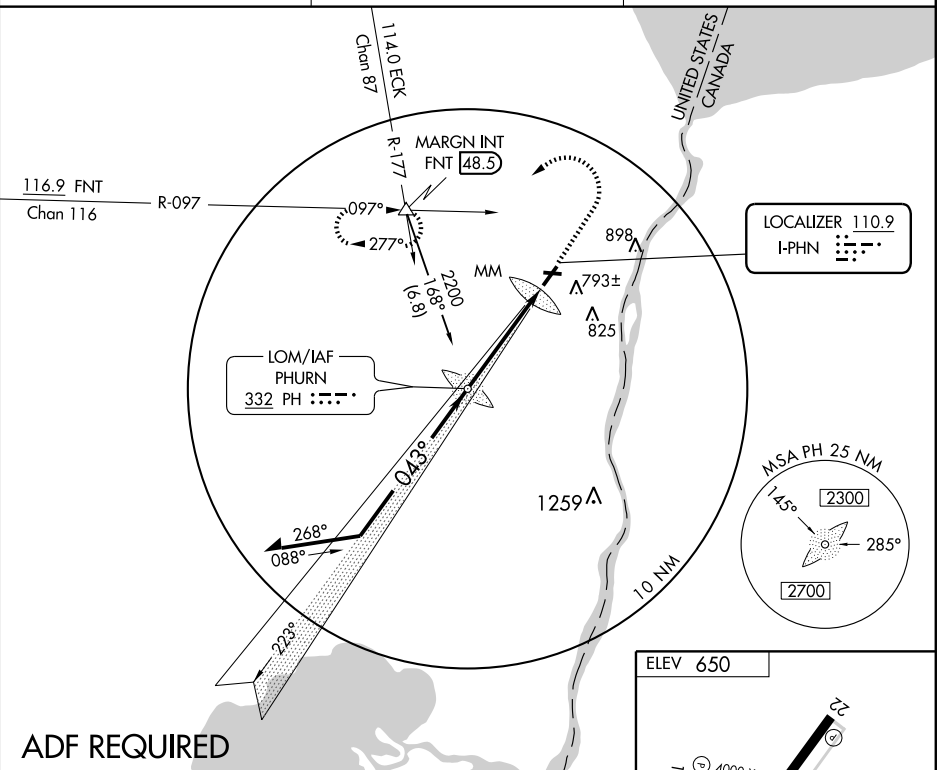


MISSED APPROACH: Climb to 4000 via heading 040° then left turn via FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

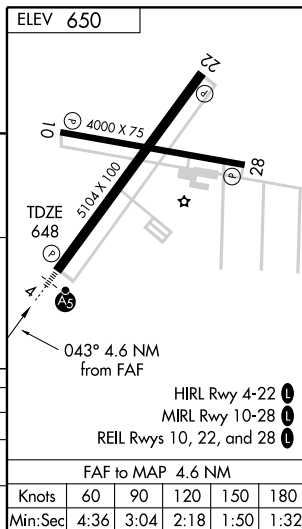
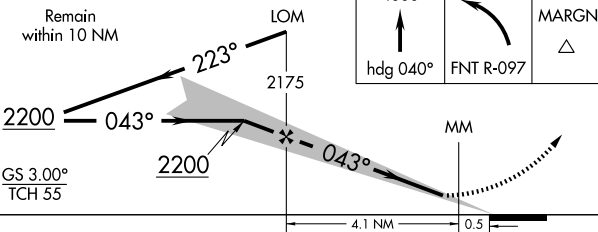
AWOS-3
118.375

SELFREDGE APP CON ★
119.6 395.9

UNICOM
123.05 (CTAF) **L**



ADF REQUIRED



PORT HURON, MICHIGAN
Amdt 3B 06MAY10

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

42°55'N - 82°32'W

ILS or LOC RWY 4

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LOM PH 332	APP CRS 043°	Rwy ldg TDZE Apt Elev	5104 648 650
----------------------	------------------------	-----------------------------	---

NDB or GPS RWY 4

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

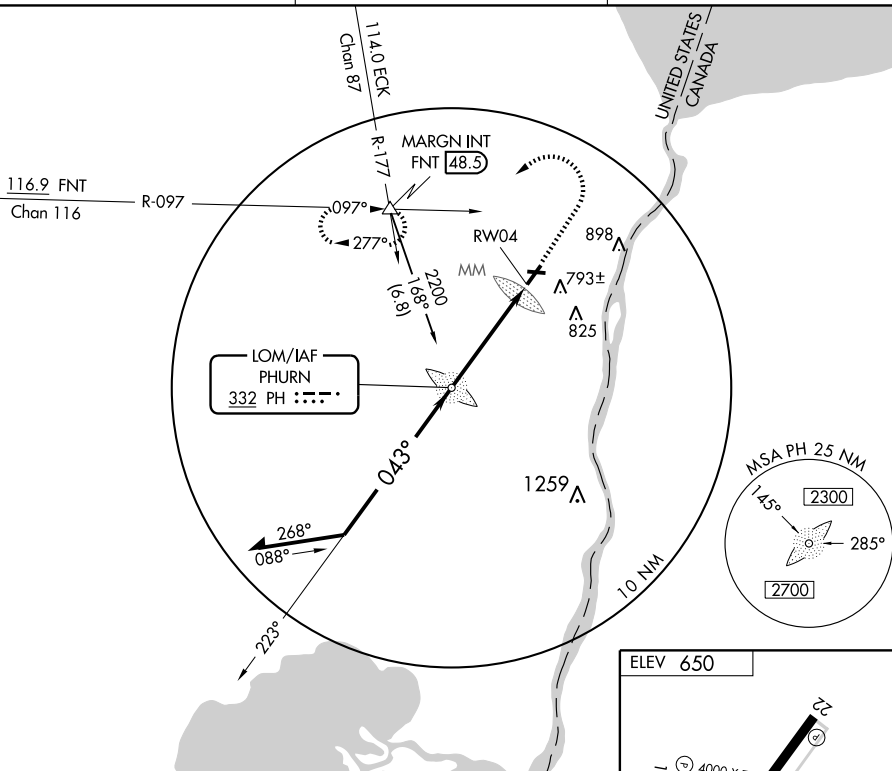


MISSED APPROACH: Climb to 4000 via heading 040° then left turn via FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

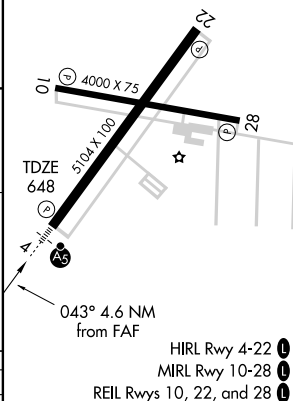
AWOS-3
118.375

SELFRIIDGE APP CON ★
119.6 395.9

UNICOM
123.05 (CTAF) **0**



ELEV 650



Remain within 10 NM

2200 223° LOM

2200 043° 2200

043° RWY04

4.6 NM

4000

HDG 040°

MARGN

FNT R-097

116.9

TDZE

648

510 X 100

4000 X 75

043° 4.6 NM from FAF

HIRL Rwy 4-22

MIRL Rwy 10-28

REIL Rwy 10, 22, and 28

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

VORTAC ECK 114.0 Chan 87	APP CRS 223°	Rwy ldg TDZE Apt Elev	5104 649 650
--	------------------------	-----------------------------	---

VOR/DME RNAV or GPS RWY 22

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

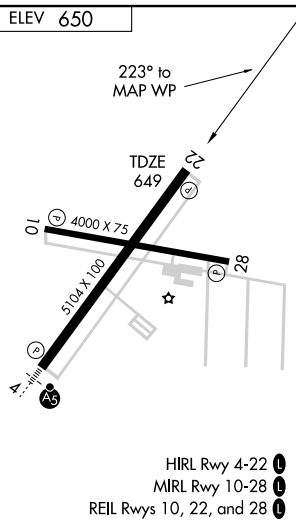
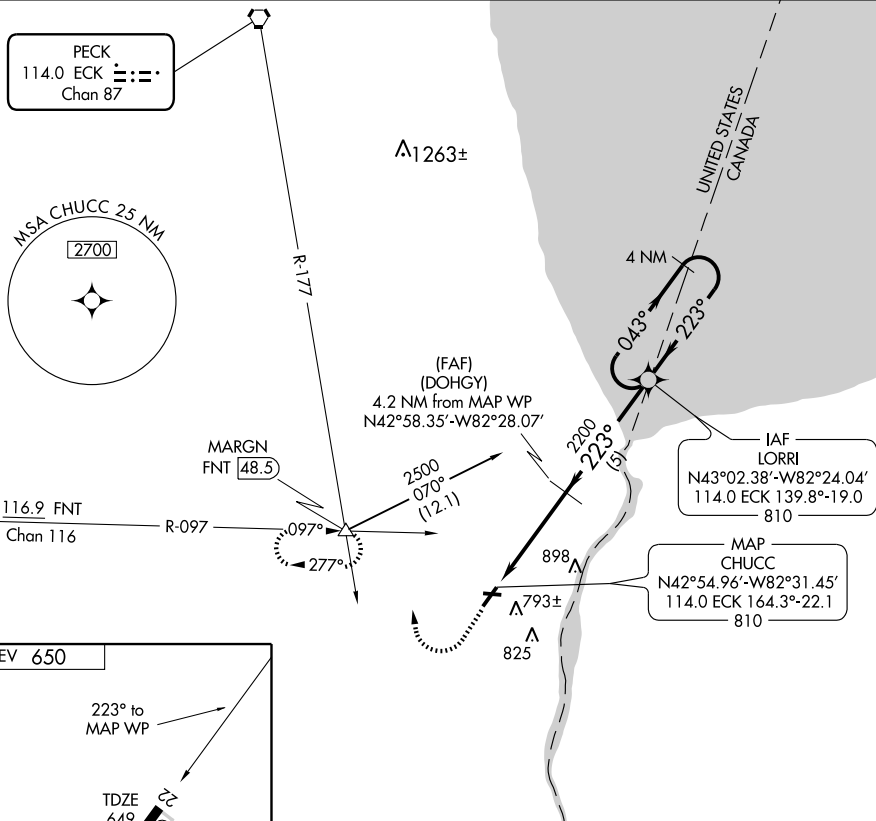


MISSED APPROACH: Climb to 4000 via heading 220° then right turn via heading 360° and FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

AWOS-3
118.375

SELFREDGE APP CON ★
119.6 395.9

UNICOM
123.05 (CTAF) **0**



4000	HDG 220°	HDG 360° FNT R-097 116.9	MARGN △	(DOHGY) 4.2 NM from MAP WP	LORRI WP	4 NM Holding Pattern	043° →	2500
CHUCC MAP WP	223°	2200	4.2 NM	5 NM			← 223°	
CATEGORY	A	B	C	D				
S-22	1220-1	571 (600-1)	1220-1½ 571 (600-1½)	1220-1¾ 571 (600-1¾)				
CIRCLING	1220-1	570 (600-1)	1220-1½ 570 (600-1½)	1220-2 570 (600-2)				

ROGERS CITY

PRESQUE ISLE CO (PZQ) 1 S UTC-5(-4DT) N45°24.43' W83°48.77'

670 B NOTAM FILE LAN

RWY 09-27: H4105X75 (ASPH) S-22 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Thld dsplcd 220'.
Trees.RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Thld dsplcd 380'.
P-line.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt.

Confirm snow removal and winter conditions; phone

989-734-2216 or arpt manager 989-734-4309. ACTIVATE MIRL

Rwy 09-27, PAPI Rwy 09 and Rwy 27, REIL Rwy 09 and Rwy
27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.125 (989) 734-7419.

COMMUNICATIONS: CTAF 122.9

ALPENA RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ ALPENA APP/DEP CON 128.425 (Weekdays 1300-2100Z)

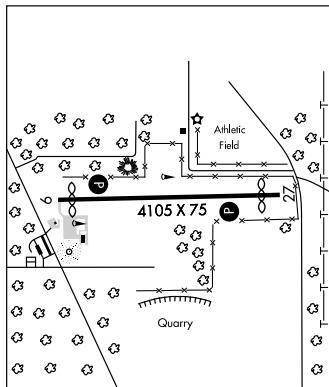
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.425 (2100-1300Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'
W83°33.42' 338° 22.3 NM to fld. 677/7W. HIWAS.

ROGERS CITY NDB (MHW) 215 PZQ N45°24.28' W83°49.22' at fld.

NOTAM FILE LAN.



ROMEO STATE (D98) 2 E UTC-5(-4DT) N42°47.78' W82°58.46'

739 B FUEL 100LL, JET A NOTAM FILE LAN

RWY 18-36: H4000X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Thld dsplcd 470'. Trees.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Road.

AIRPORT REMARKS: Attended Jun-Sep 1400Z±-dusk, Oct-May

1400-2300Z±. Deer on and invof rwy. ACTIVATE MIRL Rwy 18-36,

PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

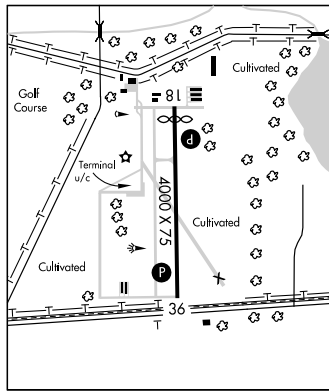
COMMUNICATIONS: CTAF/UNICOM 122.8

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

Ⓡ SELFRIEDGE APP/DEP CON 119.6 (1230-0400Z) clsd hol, other times
uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'
W83°31.97' 080° 25.3 NM to fld. 1148/3W.

DETROIT

COPTER

L-28J

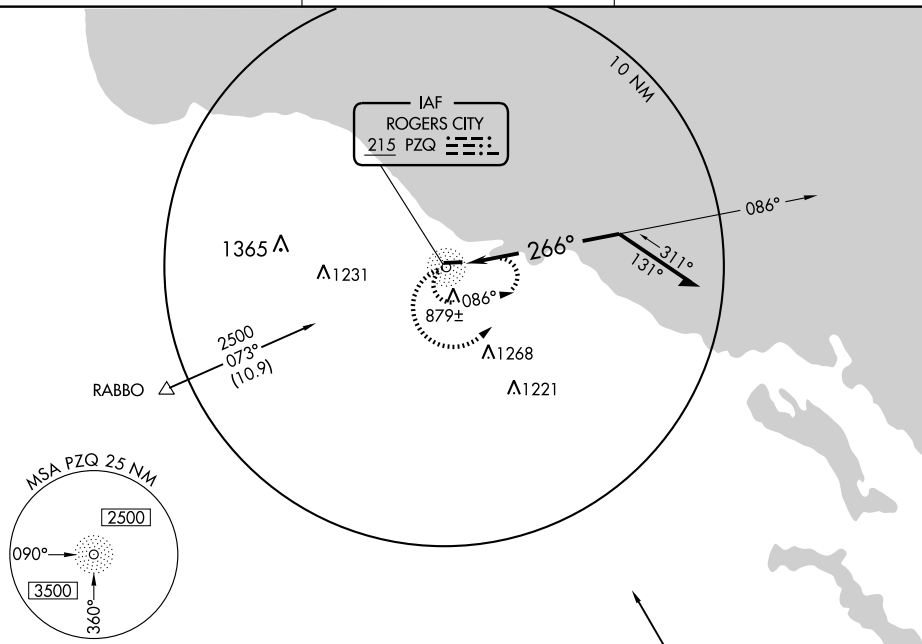
IAP

NDB PZQ
215APP CRS
266°Rwy Idg **3725**
TDZE **670**
Apt Elev **670****NDB RWY 27**

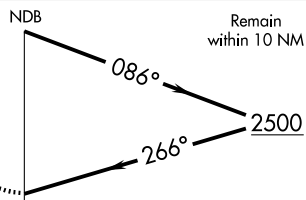
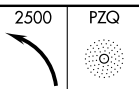
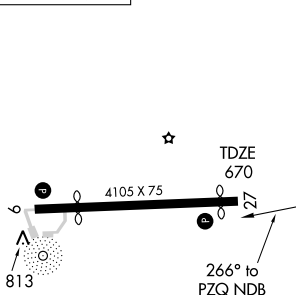
ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

NA When local altimeter setting not received, use Alpena County altimeter setting and increase all MDA 60 feet and increase S-27 and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 2500 in PZQ NDB holding pattern.

AWOS-3
118.125ALPENA APP CON ★
128.425 379.3CTAF
122.9

ELEV 670



CATEGORY	A	B	C	D
S-27	1300-1 630 (700-1)		1300-1¾ 630 (700-1¾)	NA
CIRCLING	1300-1 630 (700-1)		1300-1¾ 630 (700-1¾)	NA

MIRL Rwy 9-27
REIL Rws 9 and 27

ROGERS CITY, MICHIGAN
Amdt 3A 06MAY10

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

45°24'N - 83°49'W

NDB RWY 27

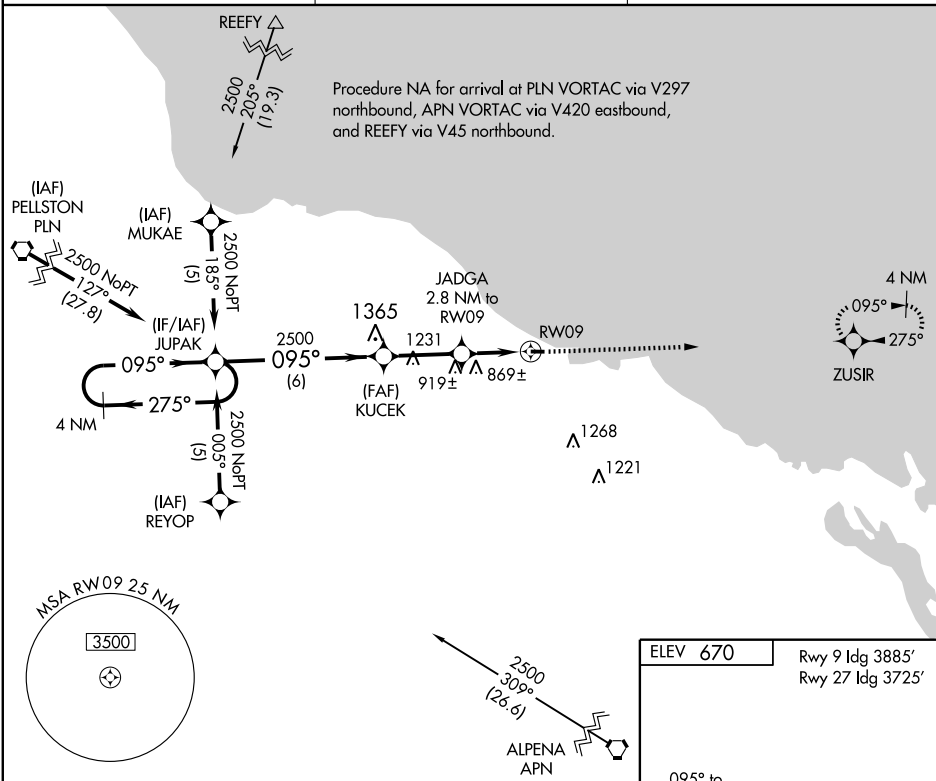
RNAV (GPS) RWY 9

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

APP CRS 095°	Rwy Idg 3885
TDZE 669	
Apt Elev 670	

<p>▼ DME/DME RNP-0.3 NA. If local altimeter setting not received, use Alpena County Rgnl altimeter setting and increase all MDAs 60 feet. When VGSI inop, straight-in/circling Rwy 9 NA at night.</p> <p>▲ NA</p>	<p>MISSED APPROACH: Climb to 2300 direct ZUSIR and hold.</p>
---	--

<p>AWOS-3 118.125</p>	<p>ALPENA APP CON ★ 128.425 379.3</p>	<p>CTAF 122.9 0</p>
----------------------------------	--	--------------------------------



4 NM Holding Pattern	JUPAK	KUCEK	JADGA 2.8 NM to RWY 9	RWY 9	ZUSIR
2500	275°	095°	3.05° TCH 35 1600		
	6 NM	2.8 NM	2.8		
CATEGORY	A	B	C	D	
LNAV MDA	1120-1	451 (500-1)	1120-1½ 451 (500-1½)	NA	
CIRCLING	1200-1 530 (600-1)	1220-1 550 (600-1)	1220-1½ 550 (600-1½)	NA	
					REIL Rwy 9 and 27 0 MRL Rwy 9-27 0

APP CRS 275°	Rwy Idg 3725
	TDZE 670
	Apt Elev 670

RNAV (GPS) RWY 27

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)



DME/DME RNP-0.3 NA. Circling NA at night to Rwy 9.
If local altimeter setting not received, use Alpena County
Rgnl altimeter setting and increase all MDAs 60 feet.
VDP NA with Alpena County Rgnl altimeter setting.

MISSED APPROACH: Climb to
2500 direct JUPAK and hold.

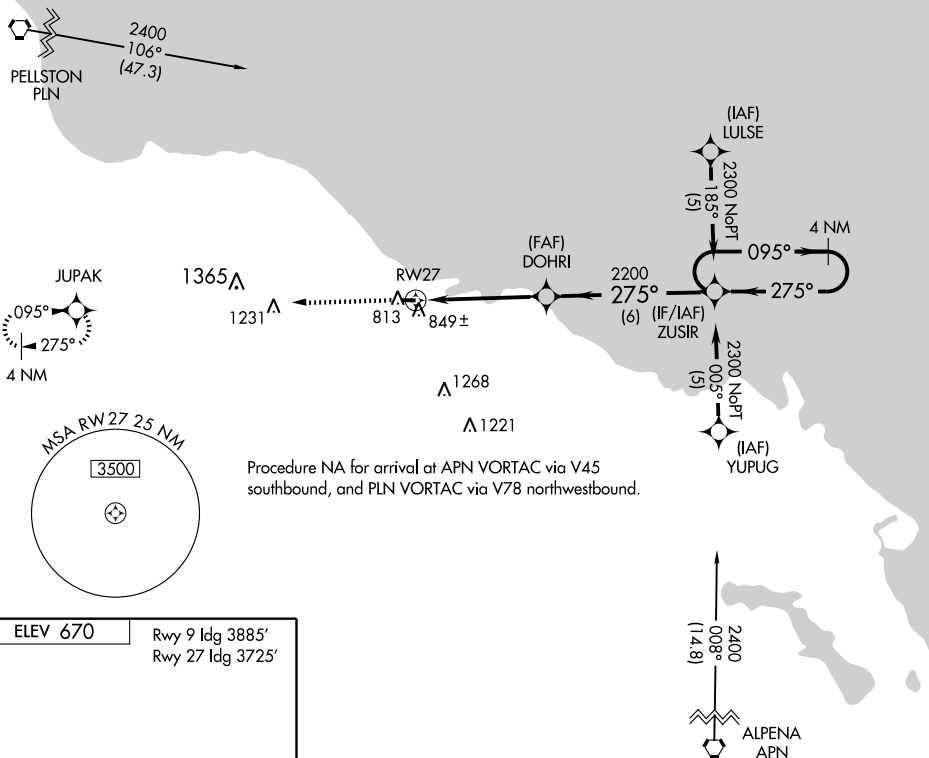
AWOS-3

118.125

ALPENA APP CON ★

128.425 379.3

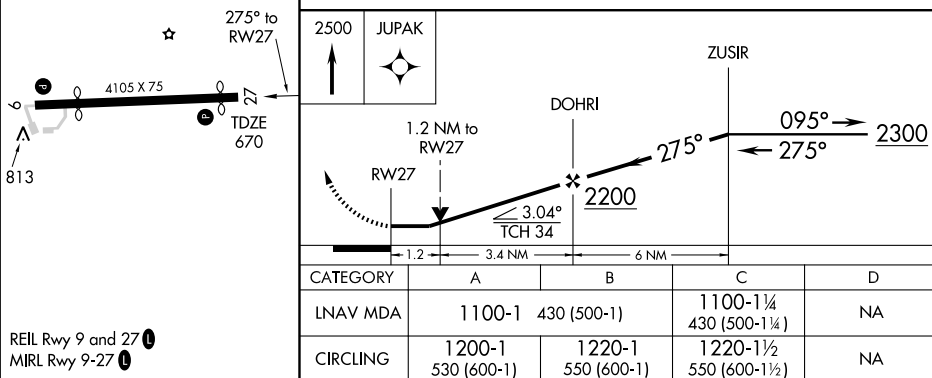
CTAF

122.9

ELEV 670

Rwy 9 Idg 3885'

Rwy 27 Idg 3725'



REIL Rwy 9 and 27

MIRL Rwy 9-27

ROGERS CITY, MICHIGAN

Orig 07242

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

45°24'N - 83°49'W

RNAV (GPS) RWY 27

ROGERS CITY

PRESQUE ISLE CO (PZQ) 1 S UTC-5(-4DT) N45°24.43' W83°48.77'

670 B NOTAM FILE LAN

RWY 09-27: H4105X75 (ASPH) S-22 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Thld dsplcd 220'.
Trees.RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Thld dsplcd 380'.
P-line.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt.

Confirm snow removal and winter conditions; phone

989-734-2216 or arpt manager 989-734-4309. ACTIVATE MIRL

Rwy 09-27, PAPI Rwy 09 and Rwy 27, REIL Rwy 09 and Rwy
27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.125 (989) 734-7419.

COMMUNICATIONS: CTAF 122.9

ALPENA RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ ALPENA APP/DEP CON 128.425 (Weekdays 1300-2100Z)

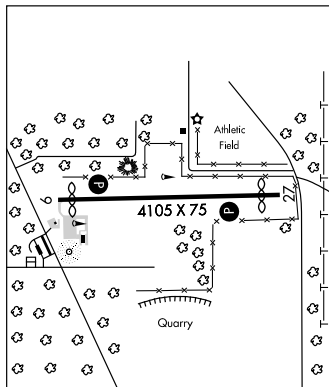
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.425 (2100-1300Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'
W83°33.42' 338° 22.3 NM to fld. 677/7W. HIWAS.

ROGERS CITY NDB (MHW) 215 PZQ N45°24.28' W83°49.22' at fld.

NOTAM FILE LAN.



ROMEO STATE (D98) 2 E UTC-5(-4DT) N42°47.78' W82°58.46'

739 B FUEL 100LL, JET A NOTAM FILE LAN

RWY 18-36: H4000X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Thld dsplcd 470'. Trees.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Road.

AIRPORT REMARKS: Attended Jun-Sep 1400Z±-dusk, Oct-May

1400-2300Z±. Deer on and invof rwy. ACTIVATE MIRL Rwy 18-36,

PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

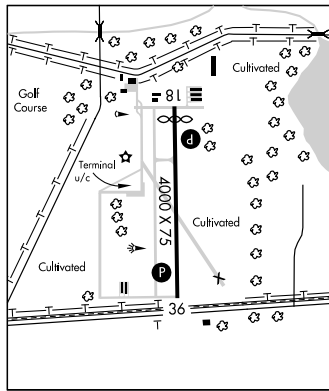
COMMUNICATIONS: CTAF/UNICOM 122.8

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

Ⓡ SELFRIEDGE APP/DEP CON 119.6 (1230-0400Z) clsd hol, other times
uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'
W83°31.97' 080° 25.3 NM to fld. 1148/3W.

DETROIT

COPTER

L-28J

IAP

APP CRS 184°	Rwy Idg TDZE Apt Elev	4000 739 739
------------------------	-----------------------------	---

RNAV (GPS) RWY 18

ROMEO STATE (D98)

▼ DME/DME RNP-0.3 NA.
▲ NA Use Coleman A. Young Muni altimeter setting, if not received use Pontiac altimeter setting and increase all MDA 20 feet.

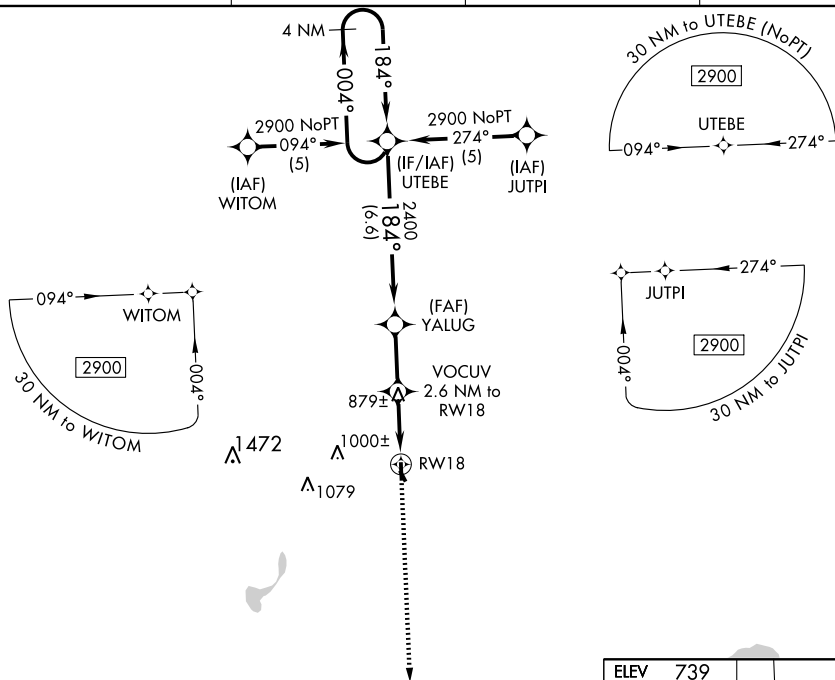
MISSED APPROACH: Climb to 2900 direct WELAS and hold.

COLEMAN A. YOUNG MUNI ASOS
124.875

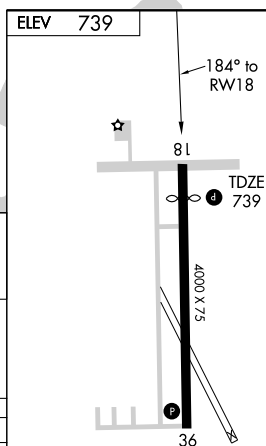
SELFREDGE APP CON ★
119.6 395.9

GCO
121.725

UNICOM
122.8 (CTAF) **0**



<p>4 NM Holding Pattern</p> <p>2900 ← 004° → 184° →</p> <p>UTEBE</p> <p>YALUG</p> <p>VOCUV 2.6 NM to RW18</p> <p>3.04° TCH 45</p> <p>2400</p> <p>1620</p> <p>6.6 NM</p> <p>2.4 NM</p> <p>2.6 NM</p> <p>VGSI and descent angles not coincident.</p>				
CATEGORY	A	B	C	D
LNAV MDA	1200-1 461 (500-1)		1200-1½ 461 (500-1½)	1200-1½ 461 (500-1½)
CIRCLING	1280-1 541 (600-1)		1280-1½ 541 (600-1½)	1420-2¼ 681 (700-2¼)



MIRL Rwy 18-36 **0**
REIL Rwy 18 and 36 **0**

APP CRS **004°**
Rwy Idg **4000**
TDZE **736**
Apt Elev **739**

RNAV (GPS) RWY 36

ROMEO STATE (D98)

NA DME/DME RNP-0.3 NA.
Use Coleman A. Young Muni altimeter setting, if not received
use Pontiac altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climb to
2900 direct UTEBE and hold.

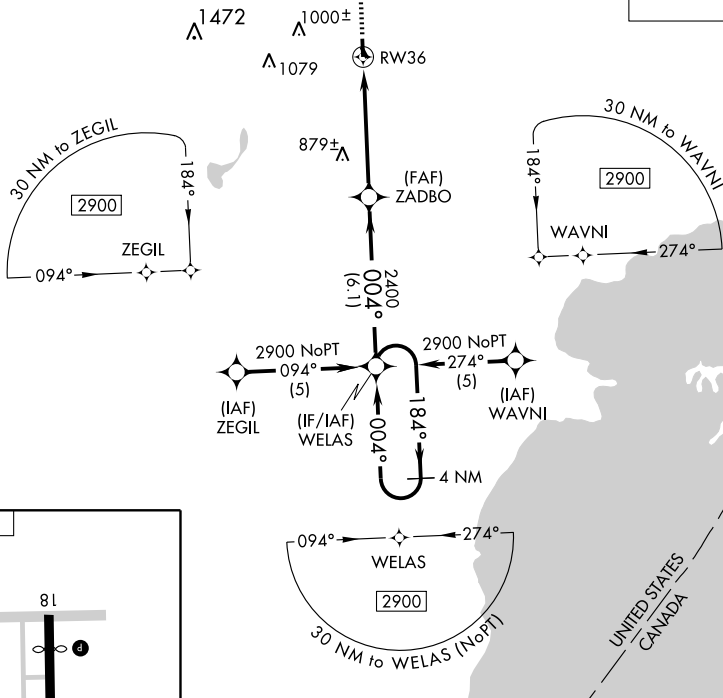
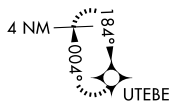
COLEMAN A. YOUNG MUNI ASOS
124.875

SELFEDGE APP CON ★
119.6 395.9

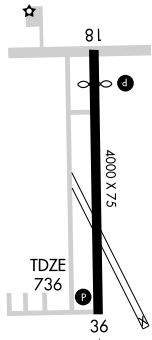
GCO
121.725

UNICOM
122.8 (CTAF)

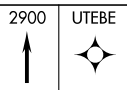
MISSED APCH FIX



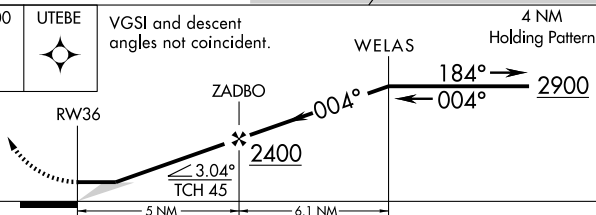
ELEV **739**



MIRL Rwy 18-36 **0**
REIL Rws 18 and 36 **0**



VGSI and descent
angles not coincident.



CATEGORY	A	B	C	D
LNAV MDA	1200-1	464 (500-1)	1200-1½ 464 (500-1½)	1200-1½ 464 (500-1½)
CIRCLING	1280-1	541 (600-1)	1280-1½ 541 (600-1½)	1420-2¼ 681 (700-2¼)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

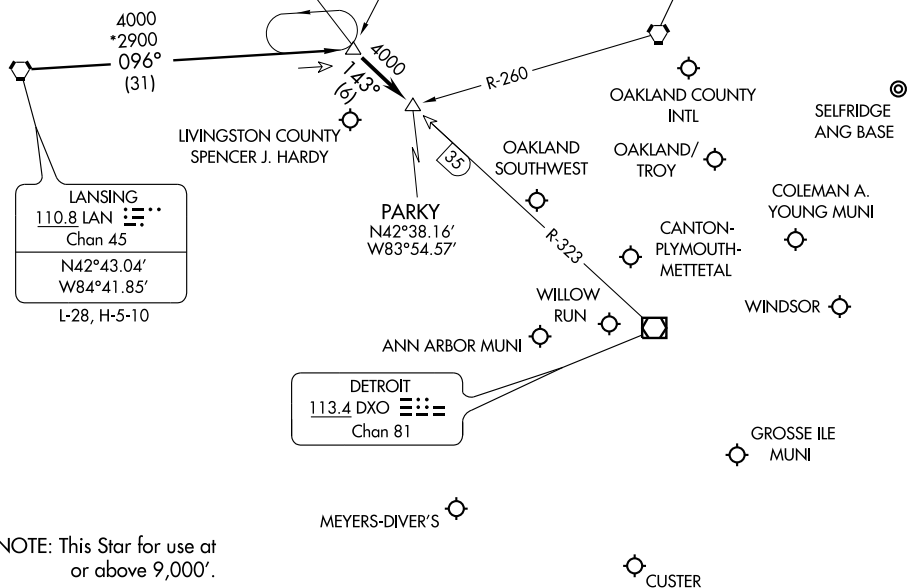
SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at
9000'.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

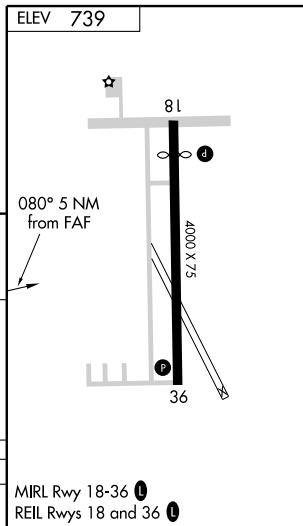
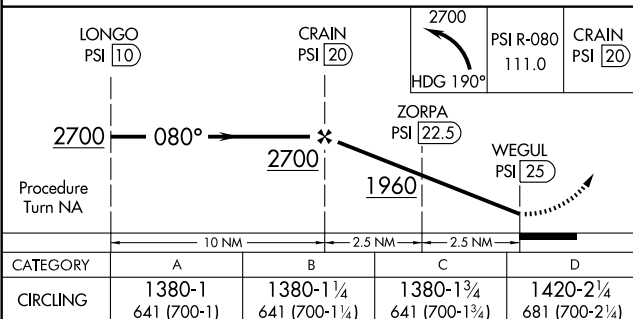
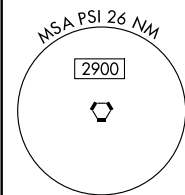
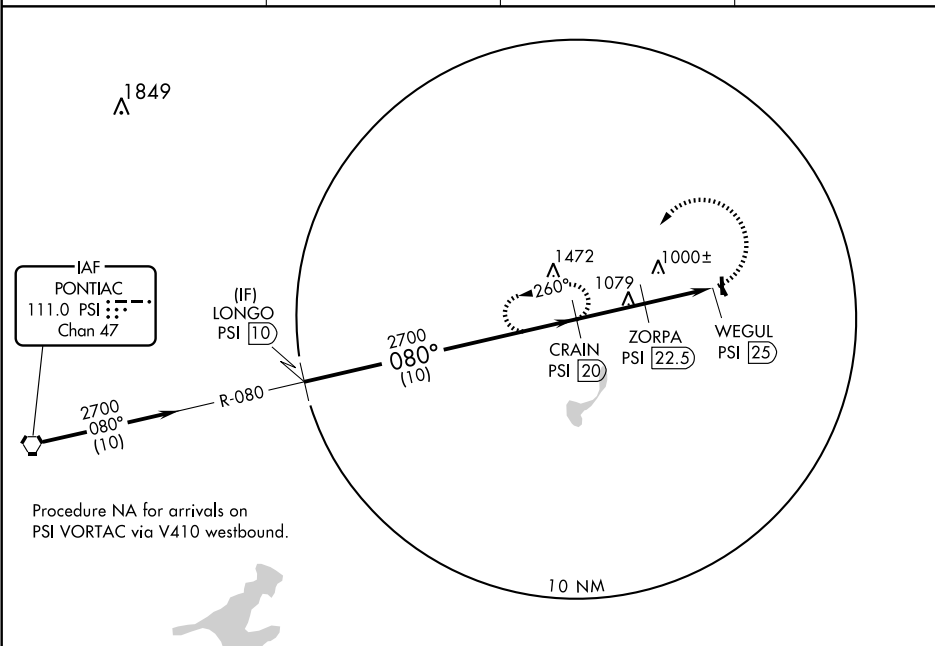
VORTAC PSI 111.0 Chan 47	APP CRS 080°	Rwy Idg TDZE Apt Elev	N/A N/A 739
--	------------------------	-----------------------------	--

VOR/DME-A
ROMEO STATE (D98)

▼ Use Coleman A. Young Muni altimeter setting, if not received
▲ NA use Pontiac altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climbing left turn to 2700
via heading 190° and PSI VORTAC R-080 to
CRAIN/20 DME and hold.

COLEMAN A. YOUNG MUNI ASOS 124.875	SELFREDGE APP CON ★ 119.6 395.9	GCO 121.725	UNICOM 122.8 (CTAF) ①
--	---	-----------------------	--



SAGINAW CO H.W. BROWNE (HYX) 4 E UTC-5(-4DT) N43°26.01' W83°51.74'

DETROIT

601 B S4 FUEL 100LL, JET A NOTAM FILE HYX

H-106, 11A, L-28J

RWY 09-27: H5000X100 (ASPH) S-60, D-72, 2D-101 MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 30'. P-line.

RWY 27: MALSR. PAPI(P2L)—GA 3.0° TCH 30'.

RWY 05-23: H2951X60 (ASPH) S-12.5 MIRL

RWY 05: PAPI(P2L)—GA 3.0° TCH 25'. Thld dspcd 120'. Fence.

RWY 23: PAPI(P2R)—GA 3.0° TCH 25'. Thld dspcd 130'. Road.

AIRPORT REMARKS: Attended Mon-Fri 1230-2300Z†, Sat-Sun

1300-2030Z†. Arpt unattended holidays. 24 hr self serve fuel.

Parachute Jumping. Birds on and invof arpt. Rwy 23 has 2' high concrete culvert, 120' left, 20' from rwy end and ditch 15' deep across the apch end, 120' left to 21' right, 20' to 197' from rwy end. Rwy 05-23 sfc numerous transverse and longitudinal cracks.

ACTIVATE MALSR Rwy 27, MIRL Rwy 05-23 and Rwy 09-27, REIL

Rwy 09 and PAPI Rwy 05, Rwy 23, Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.325 (989) 752-3408. HIWAS 112.9 MBS.

COMMUNICATIONS: CTAF/UNICOM 122.8

SAGINAW RCO 122.4 122.2 (LANSING RADIO)

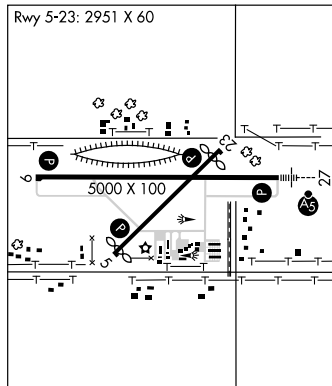
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z†)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' 125° 11.1 NM to fld. 663/3W. HIWAS.

ILS/DME 111.35 I-HQW Chan 50(Y) Rwy 27.



ST CLAIR

DAVID'S LANDING (5Y5) 3 SW UTC-5(-4DT) N42°47.87' W82°32.19'

DETROIT

615 NOTAM FILE LAN

RWY 18-36: 2500X100 (TURF)

RWY 18: Thld dspcd 1100'. P-line.

RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec-Mar and when snow covered. 100' p-line 5/8 mile S of Rwy 36. Rwy 18-36 soft in spring. Rwy 18-36 -4' ditch 10' W of Rwy. Rwy 18-36 and dspcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

ST CLAIR CO INTL (See PORT HURON)

ST HELEN (6Y6) 1SE UTC-5(-4DT) N44°22.00' W84°24.00'

LAKE HURON

1198 NOTAM FILE LAN

RWY 12-30: 2600X120 (TURF)

RWY 12: Thld dspcd 830'. Trees.

RWY 30: Thld dspcd 800'. Trees.

RWY 18-36: 2600X110 (TURF)

RWY 18: Thld dspcd 825'. Trees.

RWY 36: Thld dspcd 620'. Road.

AIRPORT REMARKS: Unattended. CLOSED Dec thru Mar and when snow covered. Hangars located 135' west of centerline Rwy 18-36. Rwy 12-30 and Rwy 18-36 dspcd thlds marked with cones.

COMMUNICATIONS: CTAF 122.9

LOC/DME I-HQW <u>111.35</u> Chan 50 (Y)	APP CRS 274°	Rwy Idg 5000 TDZE 600 Apt Elev 601
--	------------------------	---

ILS or LOC/DME RWY 27
SAGINAW COUNTY H. W. BROWNE (HYX)

T When local altimeter setting not received, use Saginaw MBS
A Intl altimeter setting and increase all DA 36 feet, increase all
ASR MDA 40 feet. VDP NA when using MBS Intl altimeter setting.

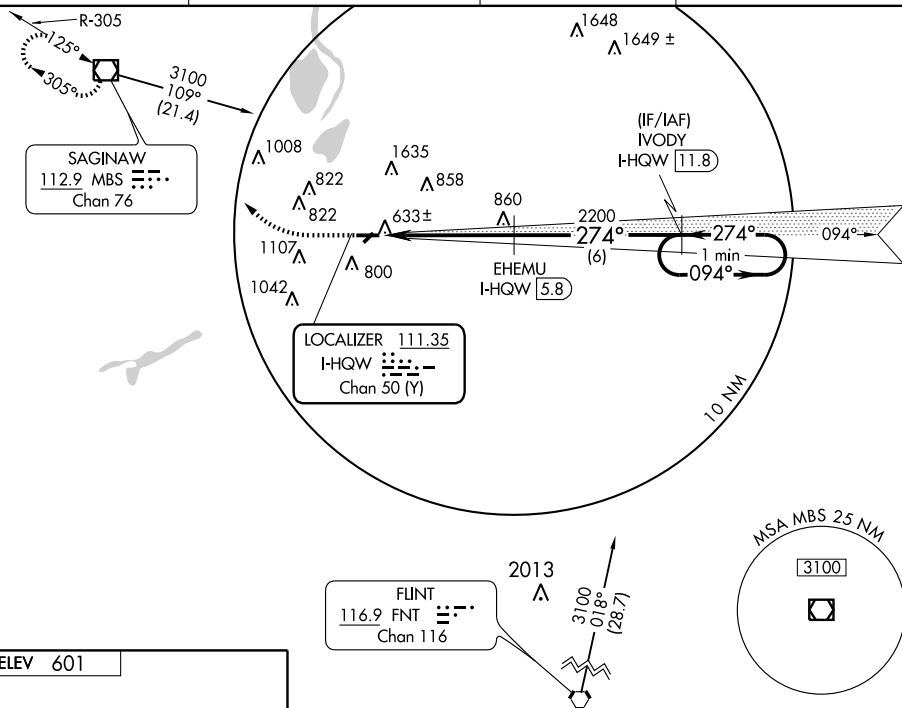
MALSR

MISSED APPROACH: Climb to 1 200 then climbing right turn to 4000 direct MBS VOR/DME and hold, continue climb-in-hold to 4000.

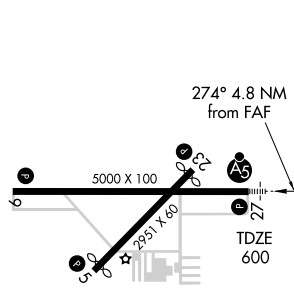
AWOS-3
118.325

SAGINAW APP CON ★
120.95 235.625

GCO
121.725

UNICOM
122.8 (CTAF) **L**

ELEV 601



REIL Rwy 9 **L**
MIRL Rwy 5-23 and 9-27 **L**

SAGINAW COUNTY H. W. BROWNE (HYX)

Orig-A 10098

43°26'N - 83°52'W

ILS or LOC/DME RWY 27

WAAS CH 50200 W09A	APP CRS 094°	Rwy Idg TDZE Apt Elev	5000 600 601
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 9

SAGINAW COUNTY H. W. BROWNE (HYX)

▼
▲ Circling to Rwy 5 NA at night. When local altimeter setting not received, use Saginaw MBS Intl altimeter setting and increase all DA 36 feet, increase LPV and LNAV/VNAV all Cats visibility $\frac{1}{4}$ mile, increase all MDA 40 feet, increase LNAV visibility Cat C $\frac{1}{4}$ mile and Circling visibility Cat C $\frac{1}{4}$ mile. VDP and Baro-VNAV NA when using Saginaw MBS Intl altimeter setting. For uncompensated Baro-VNAV system, procedure NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

MISSED APPROACH:
Climb to 2700 direct
IVODY and hold.

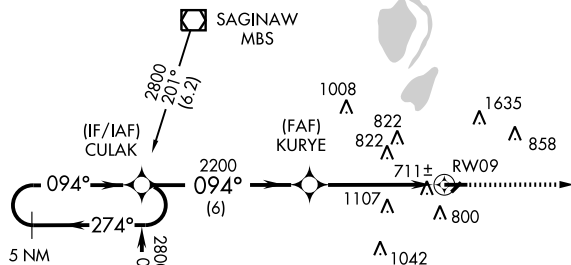
AWOS-3
118.325

SAGINAW APP CON ★
120.95 235.625

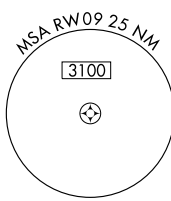
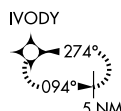
GCO
121.725

UNICOM
122.8 (CTAF) ①

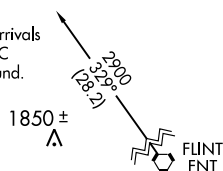
Procedure NA for arrivals
at MBS VOR/DME
on airway radials 163 CW 259.



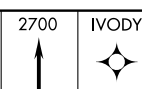
1648
▲ 1649 ±



Procedure NA for arrivals
at FNT VORTAC
via V450 eastbound.

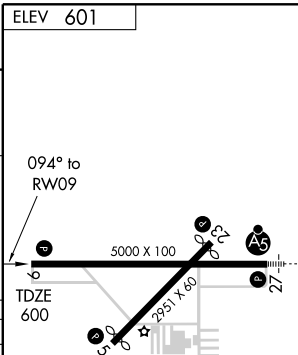


5 NM
Holding Pattern



VGSI and RNAV glidepath
not coincident.

CATEGORY	A	B	C	D
LPV DA	850- $\frac{3}{4}$	250 (300- $\frac{3}{4}$)		NA
LNAV/VNAV DA	1095-1 $\frac{3}{4}$	495 (500-1 $\frac{3}{4}$)		NA
LNAV MDA	1380-1 780 (800-1)	1380-1 $\frac{1}{4}$ 780 (800-1 $\frac{1}{4}$)	1380-2 $\frac{1}{4}$ 780 (800-2 $\frac{1}{4}$)	NA
CIRCLING	1380-1 779 (800-1)	1380-1 $\frac{1}{4}$ 779 (800-1 $\frac{1}{4}$)	1380-2 $\frac{1}{4}$ 779 (800-2 $\frac{1}{4}$)	NA



REIL Rwy 9 ①
MIRL Rwy 5-23 and 9-27 ①

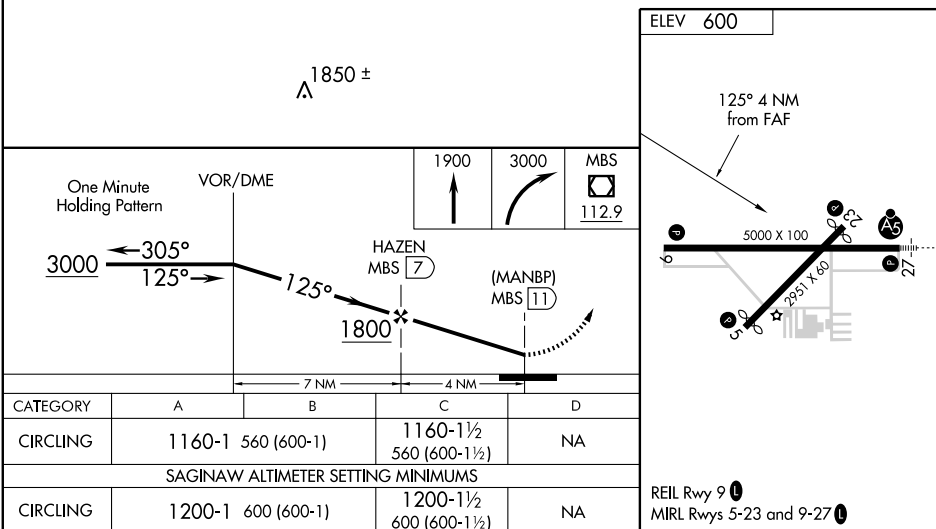
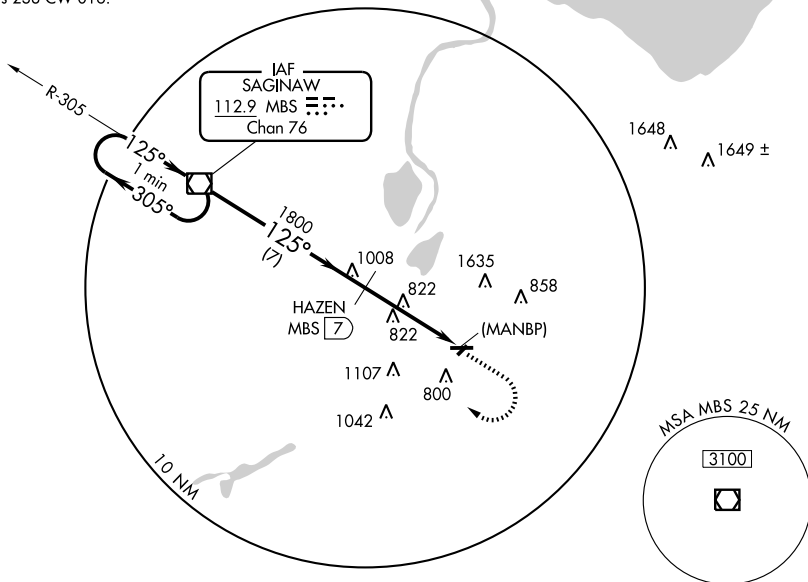
VOR/DME MBS 112.9 Chan 76	APP CRS 125°	Rwy Idg TDZE Apt Elev	N/A N/A 600
---	------------------------	-----------------------------	--

VOR/DME or GPS-A

SAGINAW COUNTY H. W. BROWNE (HYX)

<div><div><div><div></div><div></div></div><div>NA</div></div><div>Obtain local altimeter setting on CTAF; when not available use Saginaw altimeter setting.</div></div>		MISSED APPROACH: Climb to 1900, then climbing right turn to 3000 direct MBS VOR/DME and hold.	
AWOS-3 118.325	SAGINAW APP CON ★ 120.95 235.625	GCO 121.725	UNICOM 122.8 (CTAF) ①

NoPT for arrivals on MBS VOR/DME
airway radials 238 CW 016.



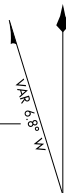
AIRPORT DIAGRAM

AL-648 (FAA)

SAGINAW / MBS INTL (MBS)
SAGINAW, MICHIGAN

ATIS
125.925
SAGINAW TOWER ★
120.1 257.7
GND CON
121.7
CLNC DEL
121.85
D

43°32.5'N



JANUARY 2010
ANNUAL RATE OF CHANGE
0.0° W

FIELD
ELEV
668

142.4°

TERMINAL

FIRE STATION

FBO

GENERAL
AVIATION
PARKING

ELEV
665

CONTROL
TOWER
741

6399 X 150

052.4°

DRAG STRIP

43°32.0'N

ELEV
659

322.4°

43°31.5'N

RWY 05-23,
S-135, D-160, 2S-175, 2D-265
RWY 14-32
S-135, D-160, 2S-175, 2D-265

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
REARBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

84°05.5'W

84°05.0'W

84°04.5'W

84°04.0'W

AIRPORT DIAGRAM

SAGINAW, MICHIGAN
SAGINAW / MBS INTL (MBS)

10210

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

SAGINAW

MBS INTL (MBS) 9 NW UTC-5(-4DT) N43°31.98' W84°04.78'

668 B S2 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks
NOTAM FILE MBS

RWY 05-23: H8002X150 (ASPH-GRVD) S-135, D-160, 2S-175, 2D-265 HIRL

RWY 05: MALSR.

RWY 23: MALSR. PAPI(P4L)—GA 3.0° TCH 54'. 0.3% up.

RWY 14-32: H6399X150 (ASPH-GRVD) S-135, D-160, 2S-175,
2D-265 HIRL

RWY 14: REIL. VASI(V4L)—GA 3.0° TCH 42'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 50'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-8002 TODA-8002 ASDA-8002 LDA-8002

RWY 14: TORA-6399 TODA-6399 ASDA-6399 LDA-6399

RWY 23: TORA-8002 TODA-8002 ASDA-8002 LDA-8002

RWY 32: TORA-6399 TODA-6399 ASDA-6399 LDA-6399

AIRPORT REMARKS: Attended continuously. For svc after hrs call 989-695-2554. Birds on and in/ov arpt. When twr clsd HIRL Rws 05-23 and 14-32 are preset med ints. Twy B is a one way only twy from the rwy to the ramp. ACTIVATE MALSR Rws 05 and 23—CTAF. Class I, ARFF Index B. Index C ARFF svc available upon req. Ldg fee. Ldg fee waived in lieu of fuel purchase.

WEATHER DATA SOURCES: ASOS (989) 695-2488. HIWAS 112.9 MBS.

LAWRS (1100-0400Z‡)

COMMUNICATIONS: CTAF 120.1 ATIS 125.925 UNICOM 122.95

SAGINAW RCO 122.4 122.2 (LANSING RADIO)

⑦ SAGINAW APP/DEP CON 126.45 (230°-049°), 120.95 (050°-229°)(1100-0400Z‡).

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z‡).

SAGINAW TOWER 120.1 (1100-0400Z‡) GND CON 121.7

CLNC DEL 121.85

AIRSPACE: CLASS D svc 1100-0400Z‡ other times CLASS E.

TRSA svc ctc APP CON within 20 NM.

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' at fld. 663/3W. HIWAS.

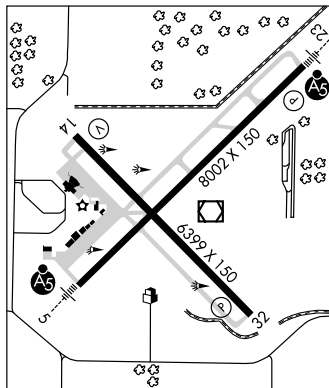
OLSTE NDB (LOM) 257 MB N43°27.69' W84°10.79' 050° 6.1 NM to fld. Unmonitored.

ILS 108.7 I-MBS Rwy 05. Class IE. LOM OLSTE NDB. ILS unmonitored when twr clsd.

ILS 108.7 I-TQR Rwy 23. Class ID. ILS unmonitored when twr clsd.

ASR (1600-0900Z‡)

COMM/NAV/WEATHER REMARKS: Emerg frequency, 121.5 not available at twr. OLSTE NDB unusable by 10 NM and between 150°-180°.



LOC I-MBS 108.7	APP CRS 050°	Rwy Idg TDZE Apt Elev	8002 666 668
---------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 5

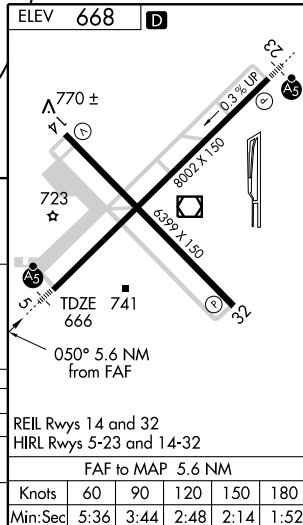
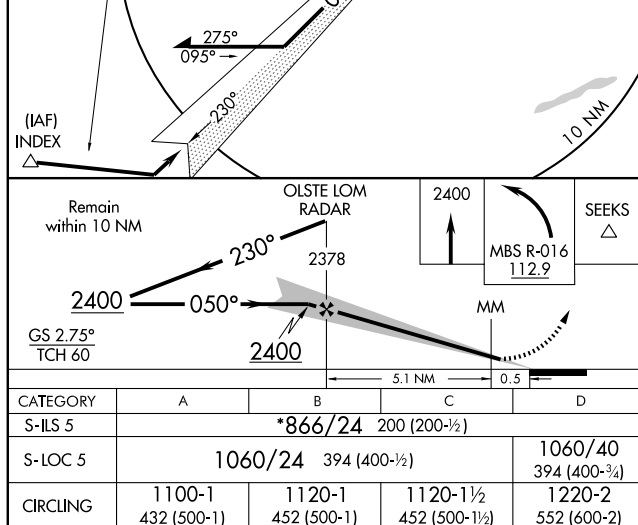
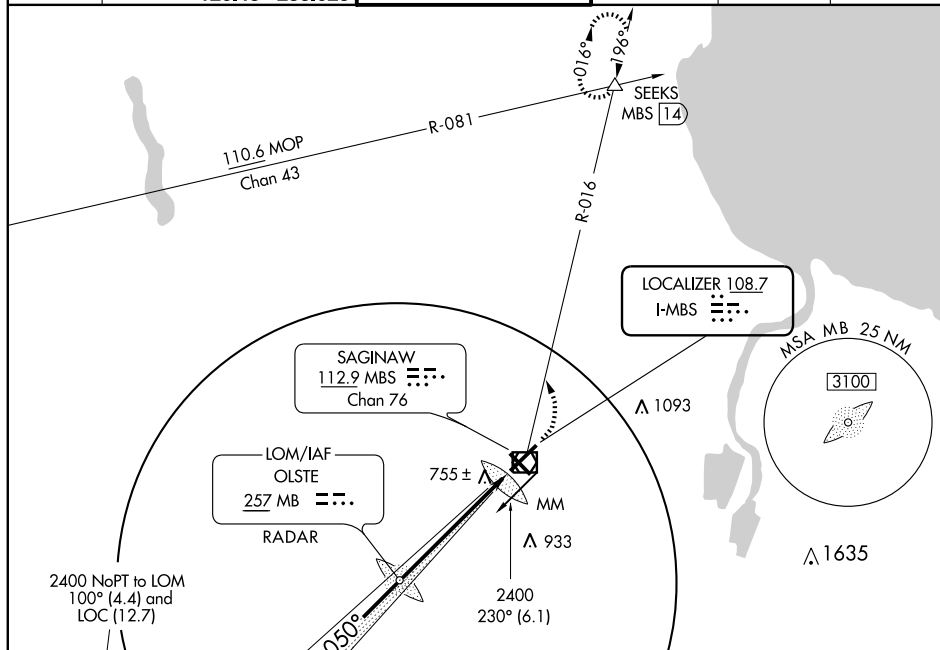
SAGINAW/MBS INTL (MBS)

ASR CAT D S-LOC visibility increased to RVR 5000 for inoperative MM. When control tower closed, activate MALSR Rwy 23 and SSALR Rwy 5 - CTAF.
* RVR 1800 authorized with the use of FD or AP or HUD to DA.



MISSED APPROACH: Climb to 2400 then left turn via MBS R-016 to SEEKS Int/14 DME and hold.

ATIS 125.925	SAGINAW APP CON ★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	---	--	-------------------------	---------------------------	-------------------------



LOC I-TQR 108.7	APP CRS 230°	Rwy Idg TDZE Apt Elev	8002 661 668
---------------------------	------------------------	-----------------------------	---

ILS or LOC RWY 23

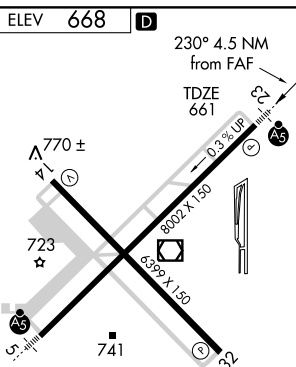
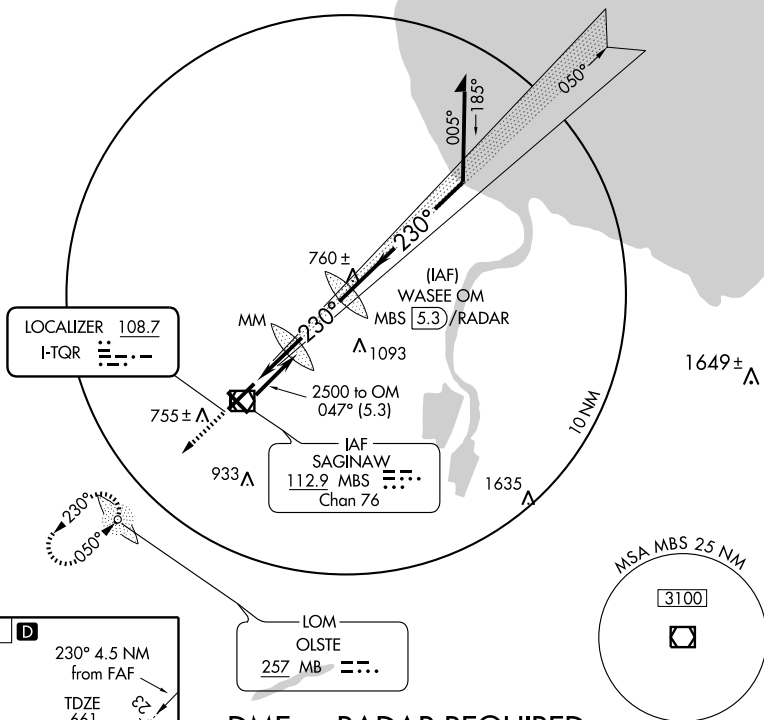
SAGINAW/MBS INTL (MBS)

V *RVR 1800 authorized with the use of FD or AP or HUD to DA.
ADF REQUIRED.
ASR

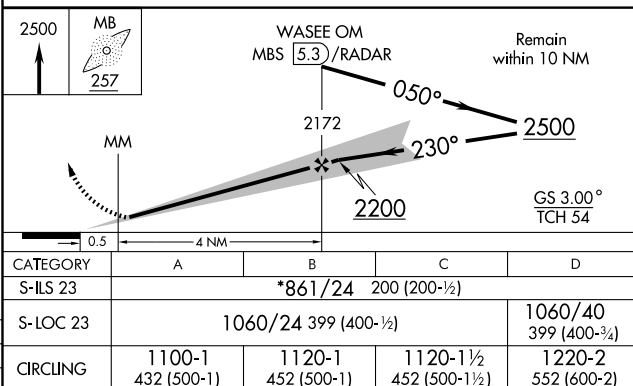


MISSED APPROACH: Climb to 2500
direct OLSTE LOM and hold.

ATIS 125.925	SAGINAW APP CON ★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	---	---	-------------------------	---------------------------	-------------------------



DME or RADAR REQUIRED



REIL Rwy 14 and 32

HIRL Rwy 5-23 and 14-32

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

SAGINAW, MICHIGAN

Amdt 4B 08APR10

43°32'N - 84°05'W

SAGINAW/MBS INTL (MBS)
ILS or LOC RWY 23

WAAS CH 82010 W05A	APP CRS 050°	Rwy Idg TDZE Apt Elev	8002 666 668
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 5

SAGINAW/ MBS INTL (MBS)

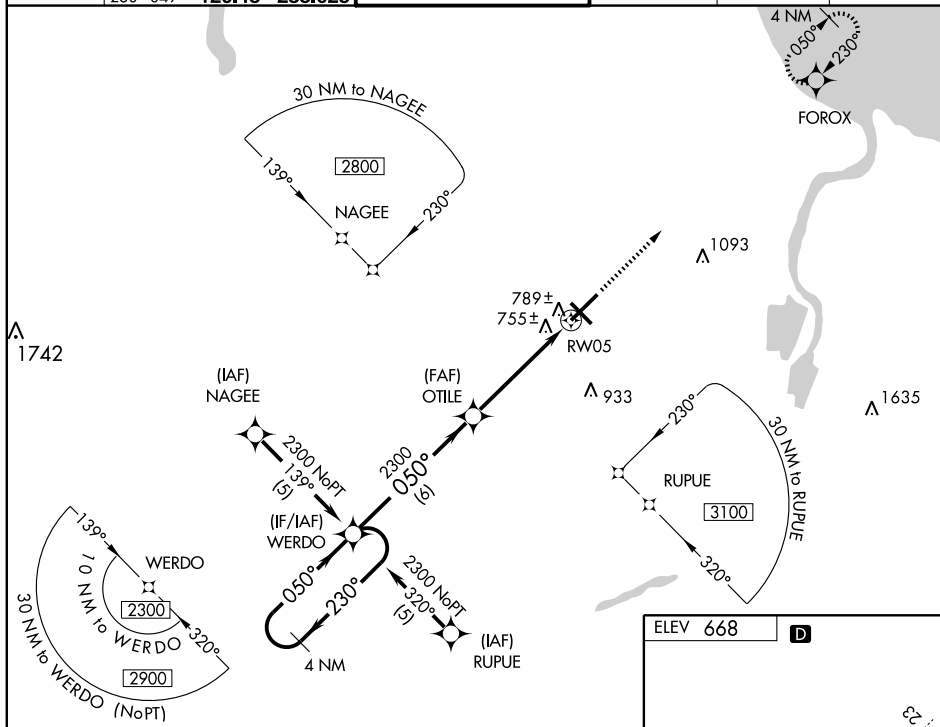
▼	When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV all
▲	Cats visibility to RVR 5000. For inoperative MALSR, increase LNAV Cat D visibility to
ASR	RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C
	[4°F] or above 47°C [116°F]. DME/DME RNP: 0.3 NA. Baro-VNAV and VDP NA
	when using Saginaw County H. W. Browne altimeter setting.

MALSR

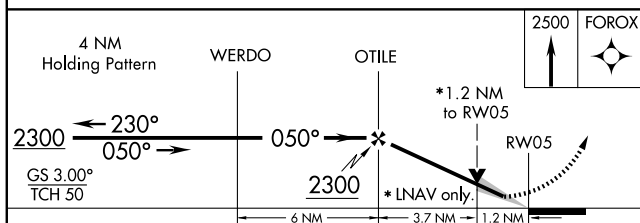


MISSED APPROACH:
Climb to 2500 direct
FOROX and hold.

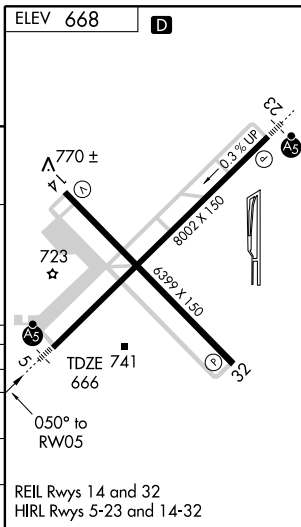
ATIS	SAGINAW APP CON ★	SAGINAW TOWER ★	GND CON	CLNC DEL	UNICOM
125.925	050°-229° 120.95 235.625 230°-049° 126.45 235.625	120.1 (CTAF) 0 257.7	121.7	121.85	122.95



EC-1. 26 AUG 2010 to 23 SEP 2010



CATEGORY	A	B	C	D
LPV DA	866/24 200 (200-½)			
LNAV/VNAV DA	1059/40 393 (400-¾)			
LNAV MDA	1080/24 414 (500-½)	1080/40 414 (500-¾)	1080/50 414 (500-1)	
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)



SAGINAW, MICHIGAN

Amdt 1 09351

43°32'N - 84°05'W

SAGINAW/ MBS INTL (MBS)

RNAV (GPS) RWY 5

WAAS CH 69211 W14A	APP CRS 140°	Rwy Idg TDZE Apt Elev	6399 668 668
--	------------------------	-----------------------------	---

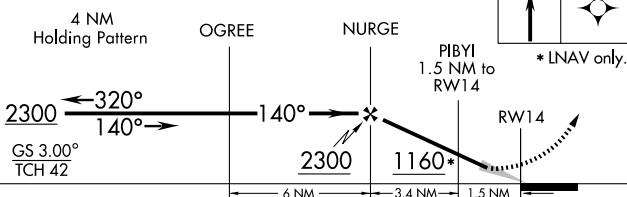
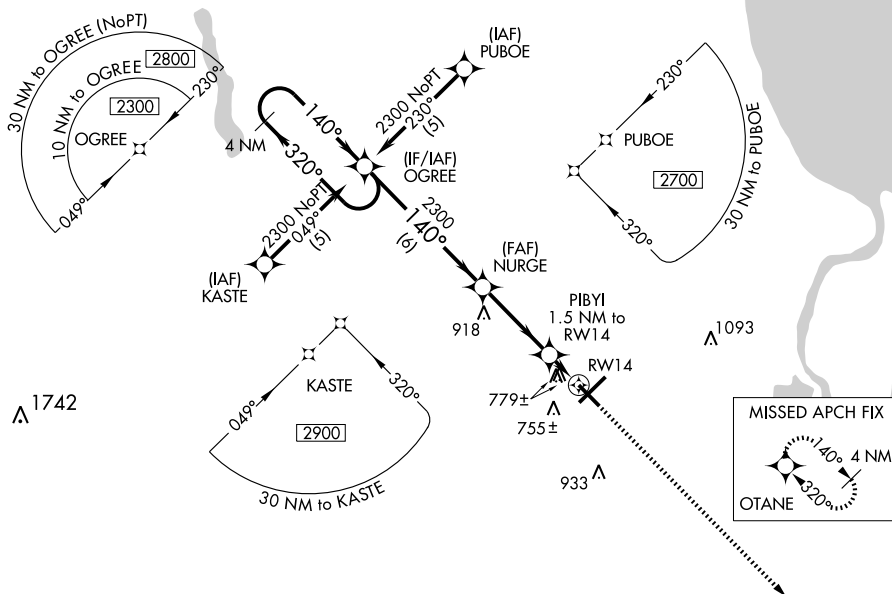
RNAV (GPS) RWY 14

SAGINAW/ MBS INTL (MBS)

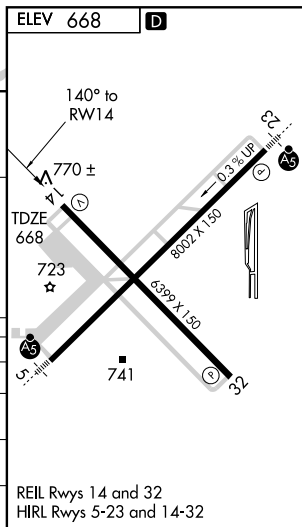
▼ Baro-VNAV NA when using Saginaw County H. W. Browne altimeter setting.
▲ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV Cat. C visibility ¼ mile. DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 2700 direct OTANE and hold.

ATIS 125.925	SAGINAW APP CON ★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	---	---	-------------------------	---------------------------	-------------------------



CATEGORY	A	B	C	D
LPV DA	1004-1¼ 336 (400-1¼)			
LNAV/VNAV DA	1079-1½ 411 (500-1½)			
LNAV MDA	1040-1 372 (400-1)			1040-1¼ 372 (400-1¼)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)

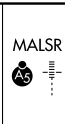


WAAS CH 49010 W23A	APP CRS 230°	Rwy Idg TDZE Apt Elev	8002 661 668
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 23

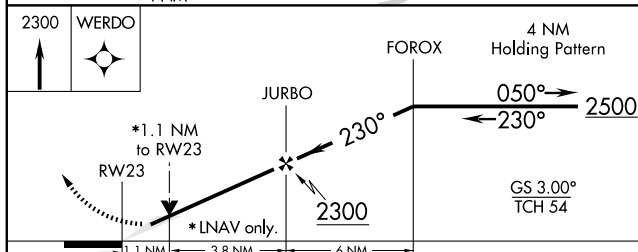
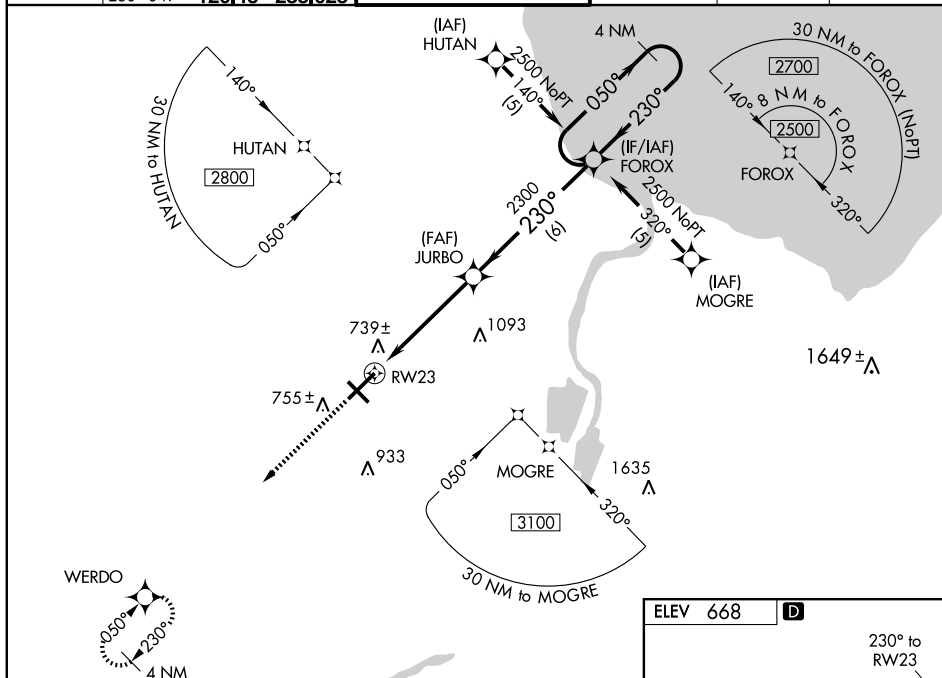
SAGINAW/ MBS INTL (MBS)

⚠ When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C visibility ½ mile. Baro-VNAV and VDP NA when using ASR Saginaw County H. W. Browne altimeter setting. For inoperative MALSR, increase LNAV Cat D visibility to 1¼. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP: 0.3 NA.

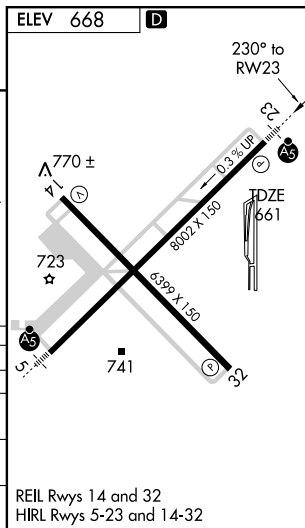


MISSED APPROACH:
Climb to 2300 direct
WERDO and hold.

ATIS 125.925	SAGINAW APP CON★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	--	--	-------------------------	---------------------------	-------------------------



CATEGORY	A	B	C	D
LPV DA	861-½	200 (200-½)		
LNAV/VNAV DA	1034-¾	373 (400-¾)		
LNAV MDA	1060-½	399 (400-½)		1060-1 399 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)



WAAS CH 78011 W32A	APP CRS 320°	Rwy Idg TDZE Apt Elev	6399 665 668
--	------------------------	-----------------------------	---

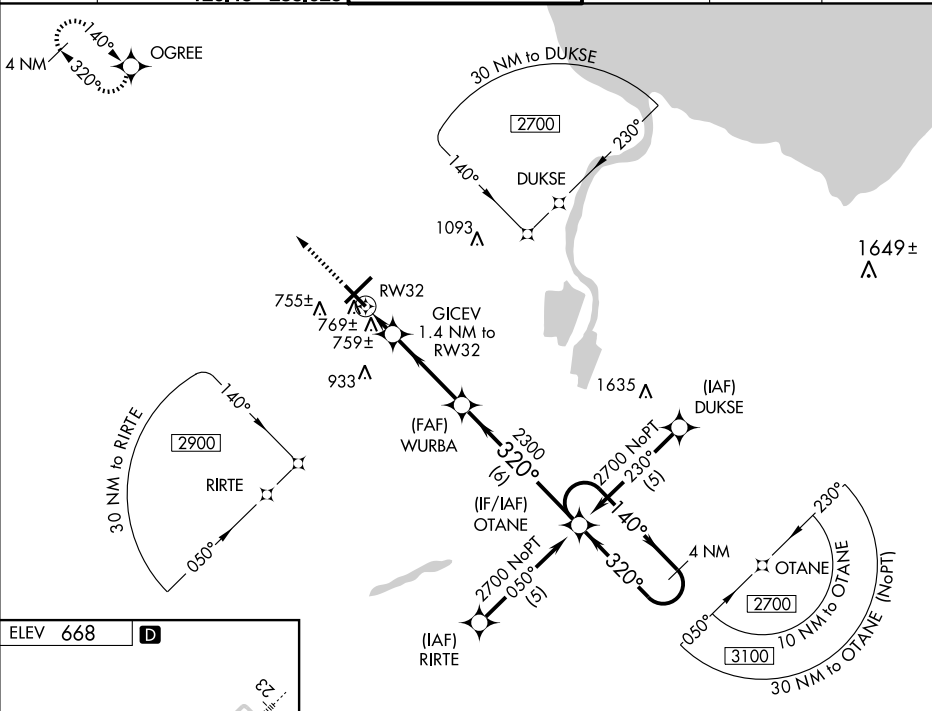
RNAV (GPS) RWY 32

SAGINAW/ MBS INTL (MBS)

▼ Baro-Vnav NA when using Saginaw County H. W. Browne altimeter setting. For uncompensated Baro-Vnav systems, LNAV/VNAV NA below -16°C (4°F) or above 47° (116°F). When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LPV all Cats. visibility and LNAV Cat. C visibility ¼ mile. DME/DME RNP- 0.3 NA.

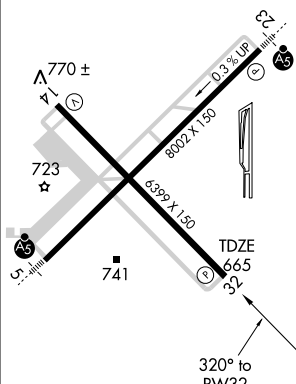
MISSED APPROACH: Climb to 2300 direct OGRE and hold.

ATIS 125.925	SAGINAW APP CON ★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	---	---	-------------------------	---------------------------	-------------------------



ELEV 668

D



REIL Rwy 14 and 32
HIRL Rwy 5-23 and 14-32

CATEGORY	2300		OGREE		OTANE		4 NM Holding Pattern	
	* LNAV only.		GICEV 1.4 NM to RW32		WURBA		140° 320° 2700	
LPV DA	1.4 NM		3.5 NM		6 NM		GS 3.00° TCH 50	
LNAV/VNAV DA	A		B		C		D	
LNAV MDA	1100-1 432 (500-1)		1120-1 452 (500-1)		1120-1½ 452 (500-1½)		1220-2 552 (600-2)	
CIRCLING	1040-1 375 (400-1)		1040-1½ 375 (400-1½)		1040-1½ 375 (400-1½)		1040-1½ 375 (400-1½)	

VOR/DME MBS 112.9 Chan 76	APP CRS 057°	Rwy Idg TDZE 666 Apt Elev 668
---	------------------------	---

VOR RWY 5

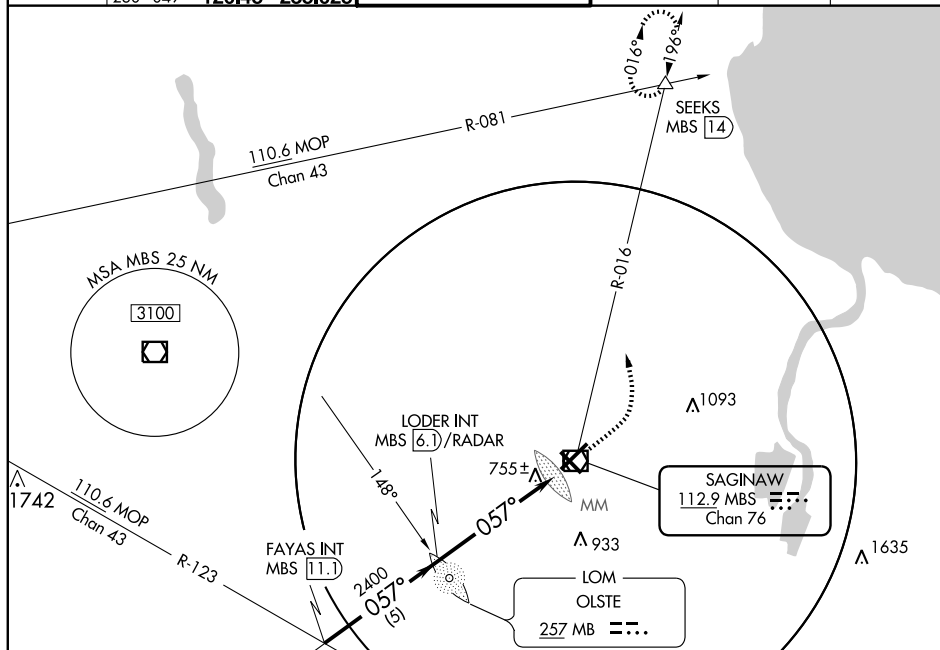
SAGINAW/MBS INTL (MBS)

V Category D S-5 visibility increased to RVR 6000
ASR for inoperative SSALR.

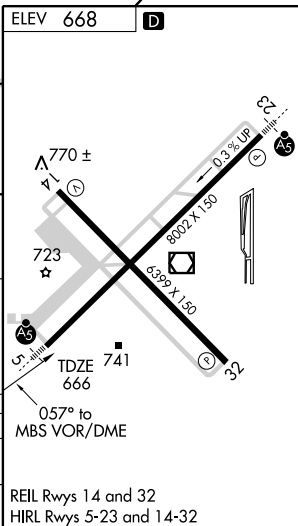
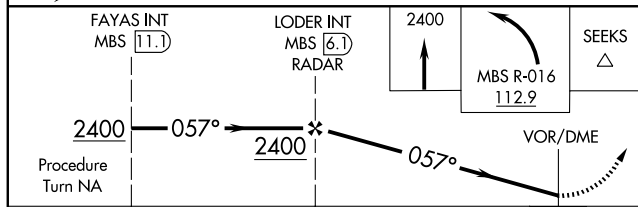


MISSED APPROACH: Climb to 2400 then left turn via MBS R-016 to Seeks Int/14 DME and hold.

ATIS 125.925	SAGINAW APP CON★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	--	--	-------------------------	---------------------------	-------------------------



DME, ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-5	1060/24 394 (400-1/2)			1060/50 394 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1 1/2 452 (500-1 1/2)	1220-2 552 (600-2)

REIL Rwy 14 and 32
HIRL Rwy 5-23 and 14-32

VOR/DME MBS 112.9 Chan 76	APP CRS 131°	Rwy Idg TDZE 668 Apt Elev 668
---	------------------------	---

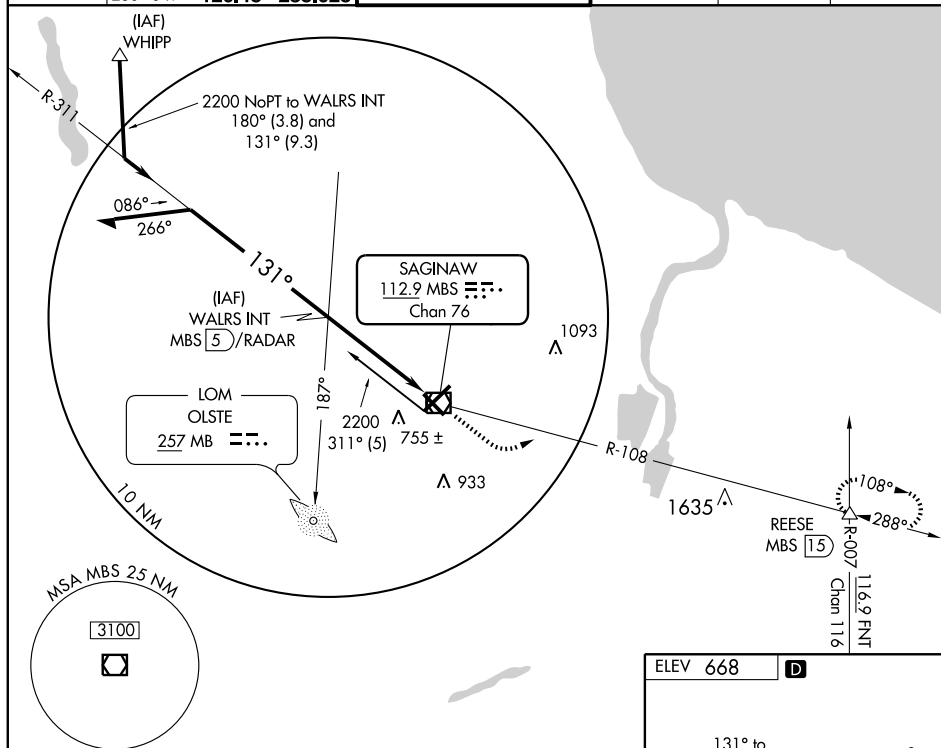
VOR RWY 14

SAGINAW/MBS INTL (MBS)

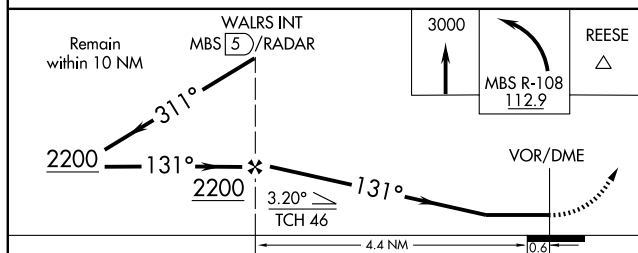
ASR Air carrier landing visibility reduction below $\frac{3}{4}$ mile for local conditions NA.

MISSED APPROACH: Climb to 3000 then left turn via MBS R-108 to REESE Int/ 15 DME and hold.

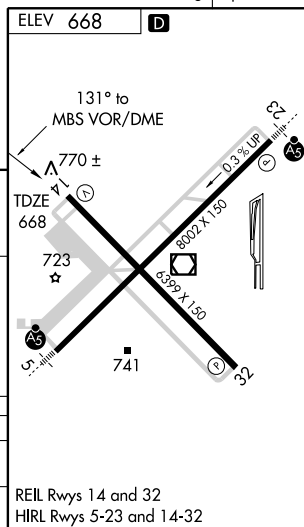
ATIS 125.925	SAGINAW APP CON★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	--	---	-------------------------	---------------------------	-------------------------



DME, ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-14	1040-1	372 (400-1)		1040-1½ 372 (400-1½)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)



VOR/DME MBS 112.9 Chan 76	APP CRS 217°	Rwy Idg TDZE Apt Elev 8002 661 668
---	------------------------	--

VOR RWY 23

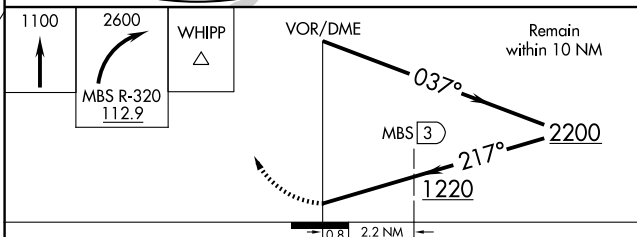
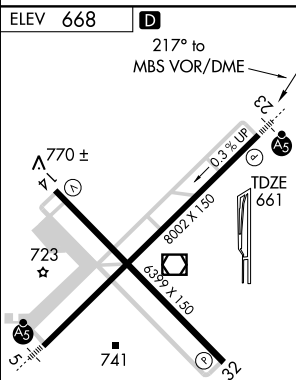
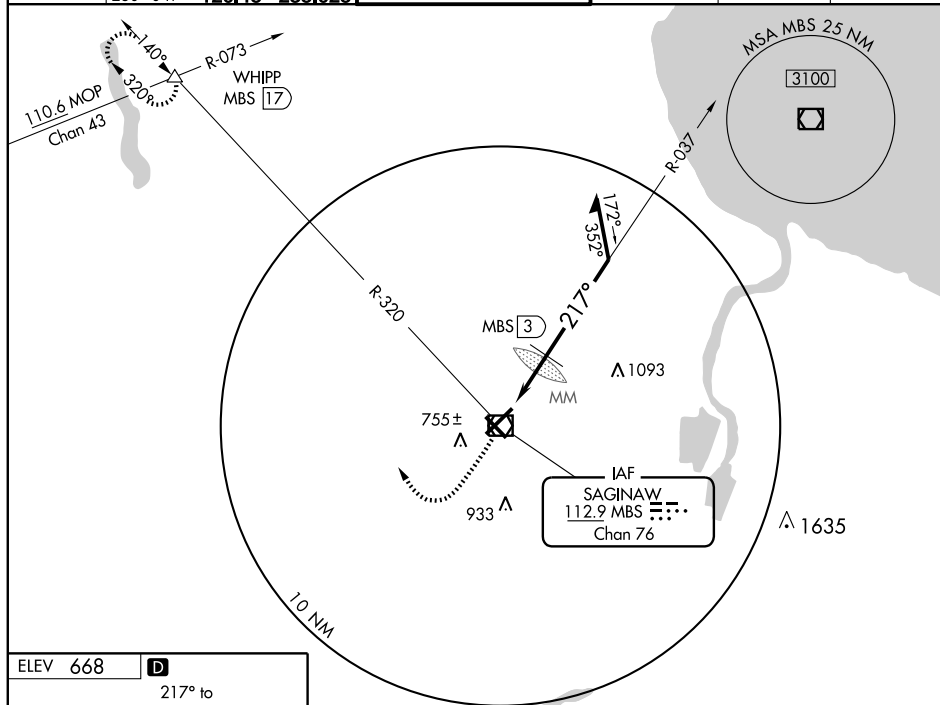
SAGINAW/MBS INTL (MBS)

ASR Cat. D S-23 DME minimums visibility increased ¼ mile for inoperative MALS/R.



MISSED APPROACH: Climb to 1100 then climbing right turn to 2600 via MBS R-320 to WHIPP Int/17 DME and hold.

ATIS 125.925	SAGINAW APP CON★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER★ 120.1 (CTAF) 0 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	--	---	-------------------------	---------------------------	-------------------------



CATEGORY	A	B	C	D
S- 23	1220-½	559 (600-½)	1220-1 559 (600-1)	1220-1¼ 559 (600-1¼)
CIRCLING	1220-1	552 (600-1)	1220-1½ 552 (600-1½)	1220-2 552 (600-2)
DME MINIMA				
S- 23	1020-½ 359 (400-½)			1020-1 359 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)

VOR/DME MBS 112.9 Chan 76	APP CRS 329°	Rwy Idg 6399 TDZE 666 Apt Elev 668
---	------------------------	---

VOR RWY 32
SAGINAW/ MBS INTL (MBS)

T
A
ASR

MISSED APPROACH: Climb to 2600 then left turn via MBS R-320 to WHIPP Int/17 DME and hold.


ATIS 125.925	SAGINAW APP CON ★ 050°-229° 120.95 235.625 230°-049° 126.45 235.625	SAGINAW TOWER ★ 120.1 (CTAF) 0 257.7	GND CON 121.7	CLNC DEL 121.85	UNICOM 122.95
------------------------	---	--	-------------------------	---------------------------	-------------------------

DME, ADF or RADAR REQUIRED

MSA MBS 25 NM

LOM
OLSTE
257 MB = ..

ELEV 668	D
----------	---

2600	
	MBS R-3
	112.9

WHIPP
△

ADDEE INT
MBS 6/RADAR

Remain
within 10 NM

The diagram shows a flight path starting from the left, labeled 'VOR/DME'. The path is a solid line that turns right. The initial heading is 329°. After a turn of 3.05°, the heading becomes 2500. The path then continues as a dashed line, turning right again to a final heading of 2600. A vertical dashed line marks the point of the 3.05° turn.

CATEGORY	A	B	C	D
S-32	1200-1 534 (600-1)		1200-1½ 534 (600-1½)	1200-1¾ 534 (600-1¾)
CIRCLING	1200-1 532 (600-1)		1200-1½ 532 (600-1½)	1220-2 552 (600-2)

SAGINAW, MICHIGAN
Amdt 9B 09351

SAGINAW/MBS INTL (MBS)
VOR RWY 32

43°32'N - 84°05'W

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

SAULT STE MARIE**CHIPPEWA CO INTL** (CIU) 15 S UTC-5(-4DT) N46°15.05' W84°28.34'**LAKE HURON**800 B FUEL 100LL, JET A TPA-1600(800) AOE Class I, ARFF Index A NOTAM FILE CIU H-2K, L-31B
RWY 16-34: H7200X200 (CONC-GRVD) S-155, D-330, 2S-175, 2D-600 HIRL IAP, AD

RWY 16: MALSR. PAPI(P4L)—GA 3.0° TCH 58'. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 09-27: H4999X75 (ASPH-GRVD) S-30, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

AIRPORT REMARKS: Attended 1100-2300Z†. After hrs call

906-495-5532. Birds on and invof arpt. 24 hours PPR for unscheduled air carrier ops with more than 9 passenger seats; call arpt manager on 906-495-5631. Airfield sfc condition unmonitored 2100-1300Z†. Expect snow removal activity daily Dec-Mar. All twys closed except A, C and D from Dec to Apr. Check NOTAMs for specific schedule or ctc arpt manager 906-495-5631. Vehicle testing in progress during winter months on sections of closed/abandoned parallel twy, SE of apch end Rwy 34. Area may be plowed to bare surface but is not avbl for acft arrivals or departures. ACTIVATE HIRL Rwy 16-34, MIRL Rwy 09-27, PAPI Rwy 16, Rwy 09 and Rwy 27, REIL Rwy 09, Rwy 27 and MALSR Rwy 16 and PAPI and REIL Rwy 34 Apr-Nov—CTAF. Rwy 34 PAPI and REIL opr continuously Dec-Mar. ARFF coverage provided scheduled FAR 121 acft only, other times by prior arrangement with airport manager. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 127.575 (906) 495-7134.**COMMUNICATIONS:** CTAF/UNICOM 123.0

CHIPPEWA RCO 123.65 (GREEN BAY RADIO)

SAULT STE MARIE RCO 122.1R 112.2T (GREEN BAY RADIO)

TORONTO CENTER APP/DEP CON 132.65 (SAULT ENROUTE)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

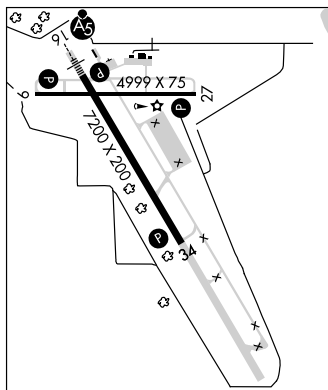
SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 218° 11.7 NM to fld. 687/4W.

KOLOE NDB (MH/LOM) 400 CI N46°19.93' W84°32.53' 155° 5.7 NM to fld.

NDB unmonitored.

ILS 110.3 I-CIU Rwy 16. Class IA. LOM KOLOE NDB. ILS unmonitored 0430Z† Sun-1000Z† Mon, 0430-1000Z† Mon-Fri, 0430Z† Fri-1145Z† Sat and 1715Z† Sat-1600Z† Sun. ILS unusable MM inbound.

Glide slope unusable blo 1012'.

**SAULT STE MARIE MUNI/SANDERSON FLD** (ANJ) 1SW UTC-5(-4DT) N46°28.75' W84°22.10'**LAKE HURON**

716 FUEL 100LL, JET A NOTAM FILE ANJ

H-2K, 11A, L-31B

RWY 14-32: H5234X100 (ASPH) MIRL (NSTD) 0.4% up SE

RWY 14: REIL. PAPI (P2L)—GA 3.0° TCH 40'. Thld dspcd 180'.

RWY 32: REIL. PAPI (P2L)—GA 3.0° TCH 29'. Thld dspcd 178'. Road. Rgt tfc.

AIRPORT REMARKS: Attended 1400-2200Z†. Fuel after hrs self svc with credit card. Deer and birds on and invof arpt.

50' drop off, north end, 200' from rwy end. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF-122.7. US customs on req call 906-632-2631.

WEATHER DATA SOURCES: ASOS 118.375 (906) 632-8501.**COMMUNICATIONS:** CTAF/UNICOM 122.7

TORONTO CENTER APP/DEP CON 132.65

GCO 135.075 (GREEN BAY FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 335° 4.6 NM to fld. 687/4W.

COMM/NAV/WEATHER REMARKS: Acft operating within Sault Ste Marie. Ontario Arpt traffic area maintain communications with Sault Ste Marie Ontario twr on frequency 118.8. Pilots operating in Canadian/US Class D Airspace are required to establish and maintain two-way communication and obtain ATC clearance from Sault Ste Marie Twr (SOO TOWER 118.8) prior to operating in the Class D Airspace. Traffic Advisory Service (118.8) is avbl in the US Class E Surface Extension 1200-0100Z†.

SAWYER INTL (See MARQUETTE)**SCHIFFER ACRES** (See ST JOHNS)**SCHOOLCRAFT CO** (See MANISTIQUE)

VOR/DME SSM
112.2
 Chan **59**

APP CRS
337°

Rwy Idg
 TDZE **5056**
 Apt Elev **716**

VOR or GPS RWY 32

SAULT STE MARIE/ SANDERSON FIELD (ANJ)

▼ Visibility reduction by helicopters NA.

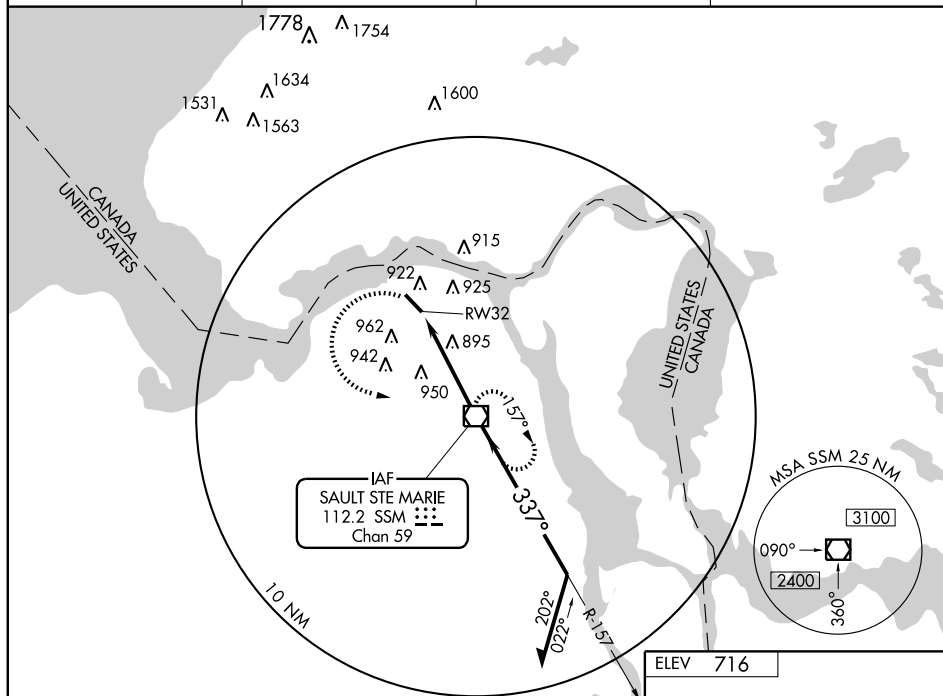
MISSED APPROACH: Climbing left turn to 2400 direct SSM VOR/DME and hold.

ASOS
118.375

TORONTO CENTER
132.65 344.5

GCO
135.075

UNICOM
122.7 (CTAF) **0**



ELEV 716

2400 SSM

VOR/DME

Remain within 10 NM

RW32 SSM 4.2

2000

2400

TDZE 716

MIRL Rwy 14-32
 REIL Rwy 14 and 32

CATEGORY	A	B	C	D
S-32	1260-1	544 (600-1)	NA	
CIRCLING	1280-1 564 (600-1)	1300-1 584 (600-1)	NA	

FAF to MAP 4.2 NM				
Knots	60	90	120	150
Min:Sec	4:12	2:48	2:06	1:41

10210

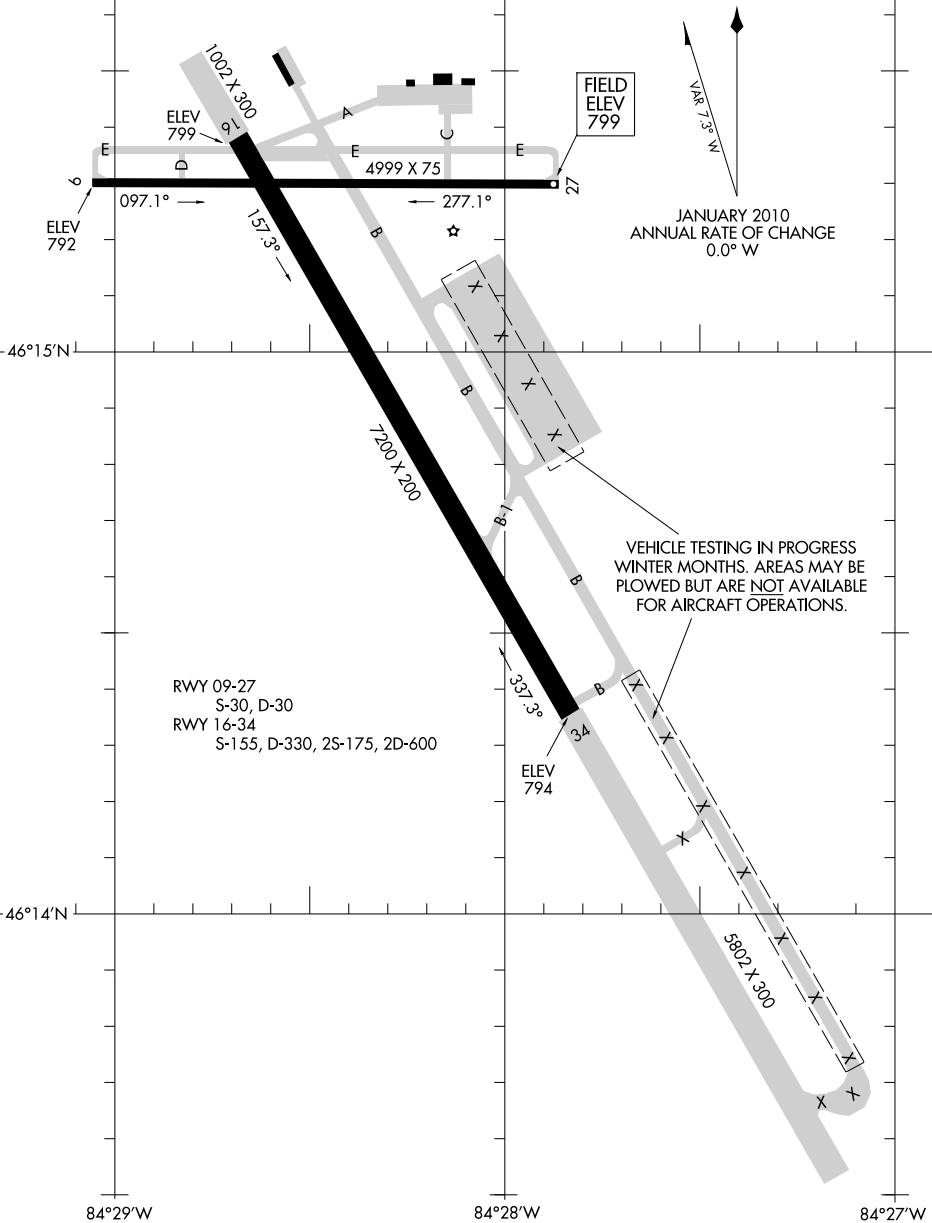
AIRPORT DIAGRAM

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

SAULT STE MARIE, MICHIGAN

AWOS-3
127.575
CTAF/UNICOM
123.0

AL-810 (FAA)
954



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

SAULT STE MARIE, MICHIGAN
SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

10210

SAULT STE MARIE**CHIPPEWA CO INTL** (CIU) 15 S UTC-5(-4DT) N46°15.05' W84°28.34'**LAKE HURON**800 B FUEL 100LL, JET A TPA-1600(800) AOE Class I, ARFF Index A NOTAM FILE CIU H-2K, L-31B
RWY 16-34: H7200X200 (CONC-GRVD) S-155, D-330, 2S-175, 2D-600 HIRL IAP, AD

RWY 16: MALS. PAPI(P4L)—GA 3.0° TCH 58'. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 09-27: H4999X75 (ASPH-GRVD) S-30, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

AIRPORT REMARKS: Attended 1100-2300Z†. After hrs call

906-495-5532. Birds on and invof arpt. 24 hours PPR for unscheduled air carrier ops with more than 9 passenger seats; call arpt manager on 906-495-5631. Airfield sfc condition unmonitored 2100-1300Z†. Expect snow removal activity daily Dec-Mar. All twys closed except A, C and D from Dec to Apr. Check NOTAMs for specific schedule or ctc arpt manager 906-495-5631. Vehicle testing in progress during winter months on sections of closed/abandoned parallel twy, SE of apch end Rwy 34. Area may be plowed to bare surface but is not avbl for acft arrivals or departures. ACTIVATE HIRL Rwy 16-34, MIRL Rwy 09-27, PAPI Rwy 16, Rwy 09 and Rwy 27, REIL Rwy 09, Rwy 27 and MALS Rwy 16 and PAPI and REIL Rwy 34 Apr-Nov—CTAF. Rwy 34 PAPI and REIL opr continuously Dec-Mar. ARFF coverage provided scheduled FAR 121 acft only, other times by prior arrangement with airport manager. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 127.575 (906) 495-7134.**COMMUNICATIONS:** CTAF/UNICOM 123.0

CHIPPEWA RCO 123.65 (GREEN BAY RADIO)

SAULT STE MARIE RCO 122.1R 112.2T (GREEN BAY RADIO)

TORONTO CENTER APP/DEP CON 132.65 (SAULT ENROUTE)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

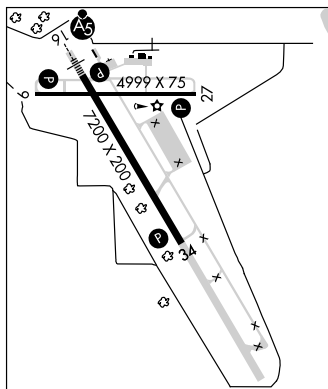
SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 218° 11.7 NM to fld. 687/4W.

KOLOE NDB (MH/LOM) 400 CI N46°19.93' W84°32.53' 155° 5.7 NM to fld.

NDB unmonitored.

ILS 110.3 I-CIU Rwy 16. Class IA. LOM KOLOE NDB. ILS unmonitored 0430Z† Sun-1000Z† Mon, 0430-1000Z† Mon-Fri, 0430Z† Fri-1145Z† Sat and 1715Z† Sat-1600Z† Sun. ILS unusable MM inbound.

Glide slope unusable blo 1012'.

**SAULT STE MARIE MUNI/SANDERSON FLD** (ANJ) 1SW UTC-5(-4DT) N46°28.75' W84°22.10'**LAKE HURON**

716 FUEL 100LL, JET A NOTAM FILE ANJ

H-2K, 11A, L-31B

RWY 14-32: H5234X100 (ASPH) MIRL (NSTD) 0.4% up SE

RWY 14: REIL. PAPI (P2L)—GA 3.0° TCH 40'. Thld dspcd 180'.

RWY 32: REIL. PAPI (P2L)—GA 3.0° TCH 29'. Thld dspcd 178'. Road. Rgt tfc.

AIRPORT REMARKS: Attended 1400-2200Z†. Fuel after hrs self svc with credit card. Deer and birds on and invof arpt.

50' drop off, north end, 200' from rwy end. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF-122.7. US customs on req call 906-632-2631.

WEATHER DATA SOURCES: ASOS 118.375 (906) 632-8501.**COMMUNICATIONS:** CTAF/UNICOM 122.7

TORONTO CENTER APP/DEP CON 132.65

GCO 135.075 (GREEN BAY FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 335° 4.6 NM to fld. 687/4W.

COMM/NAV/WEATHER REMARKS: Acft operating within Sault Ste Marie. Ontario Arpt traffic area maintain communications with Sault Ste Marie Ontario twr on frequency 118.8. Pilots operating in Canadian/US Class D Airspace are required to establish and maintain two-way communication and obtain ATC clearance from Sault Ste Marie Twr (SOO TOWER 118.8) prior to operating in the Class D Airspace. Traffic Advisory Service (118.8) is avbl in the US Class E Surface Extension 1200-0100Z†.

SAWYER INTL (See MARQUETTE)**SCHIFFER ACRES** (See ST JOHNS)**SCHOOLCRAFT CO** (See MANISTIQUE)

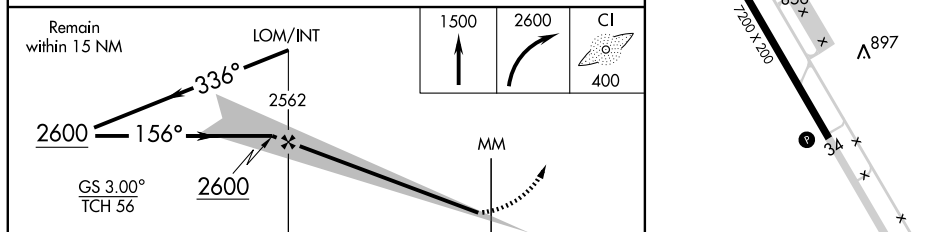
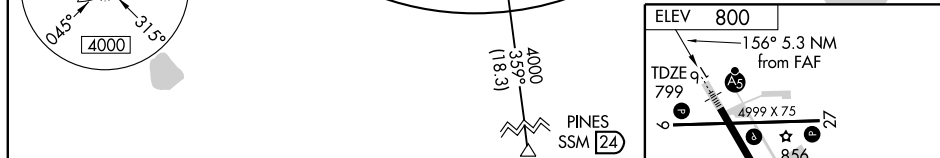
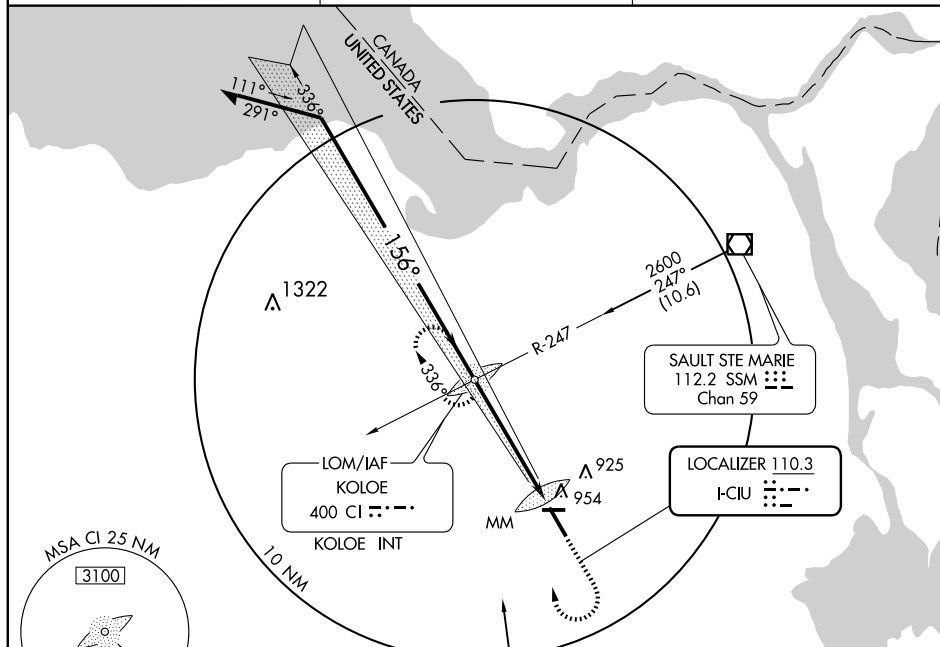
LOC I-CIU 110.3	APP CRS 156°	Rwy Idg TDZE Apt Elev	7200 799 800
---------------------------	------------------------	-----------------------------	---

ILS RWY 16

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

NA	ILS unusable from MM inbound.	MALSR 	MISSED APPROACH: Climb to 1500 then climbing right turn to 2600 direct CI LOM/Int and hold. (TACAN aircraft climb to 5000 via 160° heading and SSM R-201 to PINES Int/24 DME and hold South, 021° inbound).
-----------	-------------------------------	-----------	---

AWOS-3 127.575	TORONTO CENTER 132.65 344.5	UNICOM 123.0 (CTAF) 0
--------------------------	---------------------------------------	---------------------------------



CATEGORY	A	B	C	D	E
S-ILS 16	1049-½	250 (300-½)		1049-¾	250 (300-¾)
S-LOC 16	1160-½	361 (400-½)		1160-¾	361 (400-¾)
CIRCLING	1260-1	460 (500-1)	1260-1½ 460 (500-1½)	1360-2 560 (600-2)	1380-2 580 (600-2)

SAULT STE MARIE, MICHIGAN

Amdt 8 08157

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

ILS RWY 16

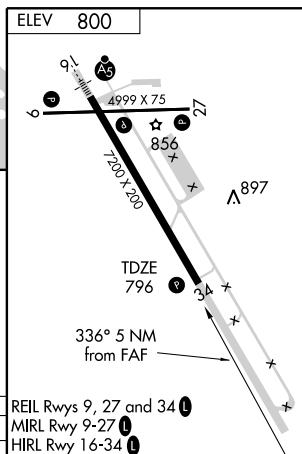
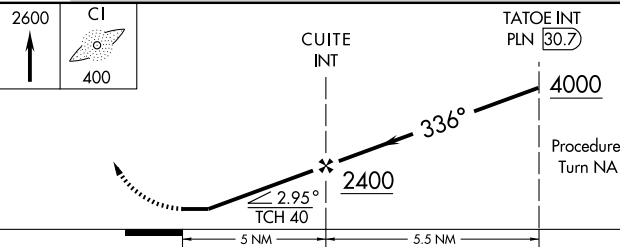
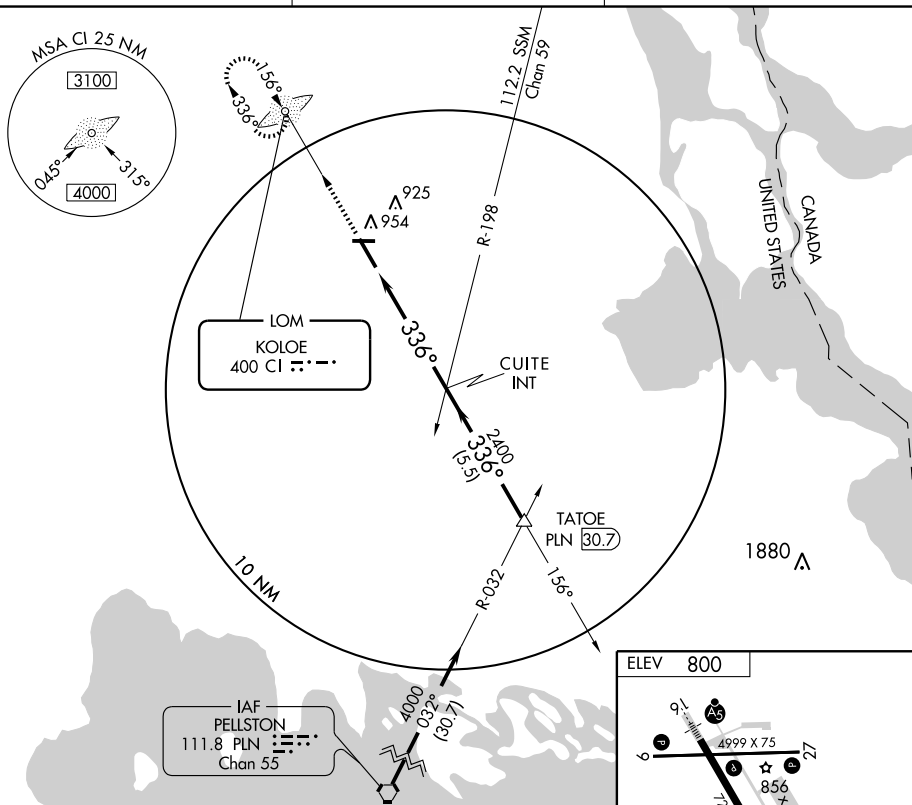
LOM CI 400	APP CRS 336°	Rwy Idg TDZE Apt Elev	7200 796 800
----------------------	------------------------	-----------------------------	---

NDB RWY 34

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

▲ NA

MISSED APPROACH: Climb to 2600 direct CI LOM and hold.

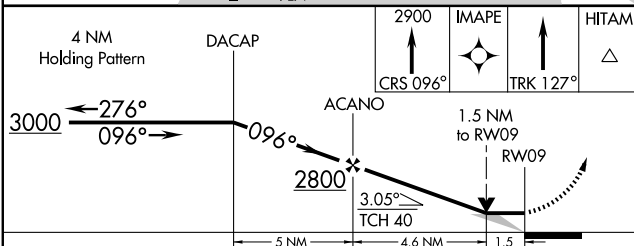
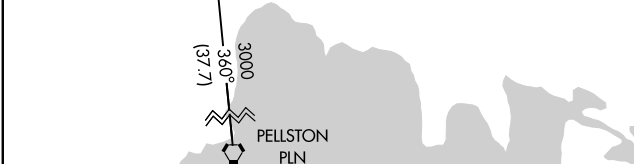
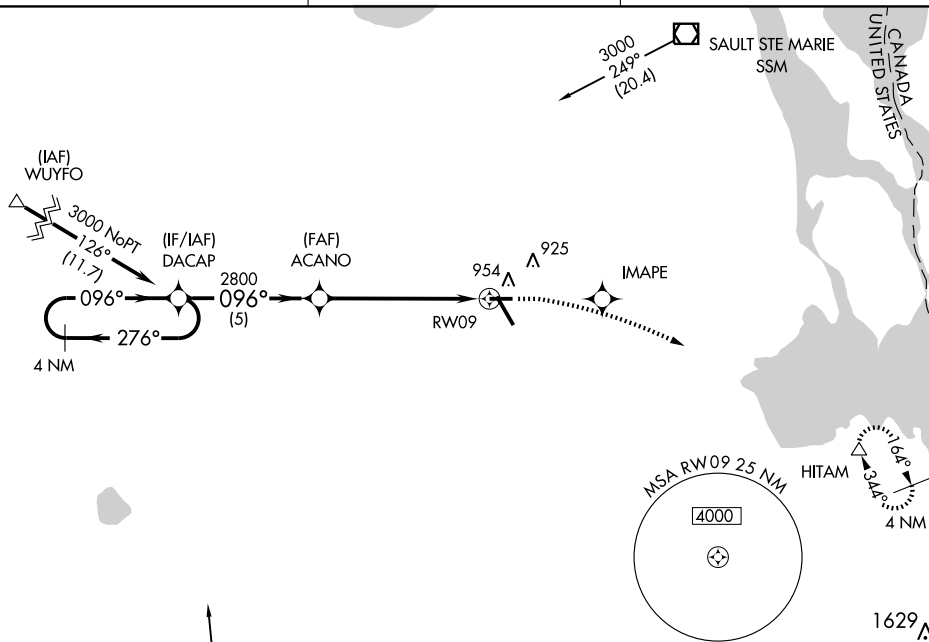
AWOS-3
127.575TORONTO CENTER
132.65 344.5UNICOM
123.0 (CTAF) 0

CATEGORY	A	B	C	D
S-34	1220-1 424 (500-1)		1220-1½ 424 (500-1½)	
CIRCLING	1260-1 460 (500-1)		1260-1½ 460 (500-1½)	1360-2 560 (600-2)

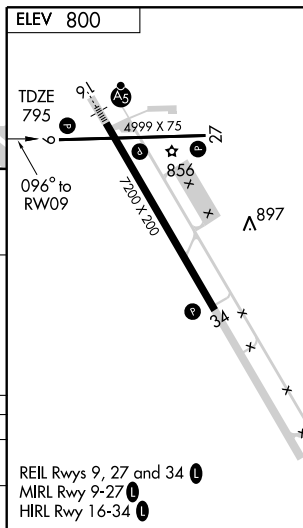
FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

RNAV (GPS) RWY 9

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

APP CRS
096°Rwy Idg **4999**
TDZE **795**
Apt Elev **800**Straight-in minimums NA at night.
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.MISSED APPROACH: Climb to 2900 via 096° course to
IMAPE WP and via 127° track to HITAM WP and hold.AWOS-3
127.575TORONTO CENTER
132.65 344.5UNICOM
123.0 (CTAF) 1

CATEGORY	A	B	C	D
RNAV MDA	1320 - 1	525 (600-1)	1320 - 1½ 525 (600-1½)	1320 - 1¾ 525 (600-1¾)
CIRCLING	1320 - 1	520 (600-1)	1320 - 1½ 520 (600-1½)	1360 - 2 560 (600-2)



WAAS CH 69215 W16A	APP CRS 156°	Rwy Idg TDZE Apt Elev	7200 799 800
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 16

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.6°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson Field altimeter setting and increase all DA 45 feet and all MDA 60 feet. Baro-VNAV and VDP NA when using Sault Ste Marie Muni/Sanderson Field altimeter setting. For inoperative MALS, increase LPV all Cats, LNAV/VNAV all Cats and LNAV Cats A/B/C ½ mile, increase LNAV Cat D ¼ mile. For inoperative MALS, when using Sault Ste Marie Muni/Sanderson Field altimeter setting, increase LPV all Cats, LNAV/VNAV all Cats and LNAV all Cats ½ mile.

MALSR

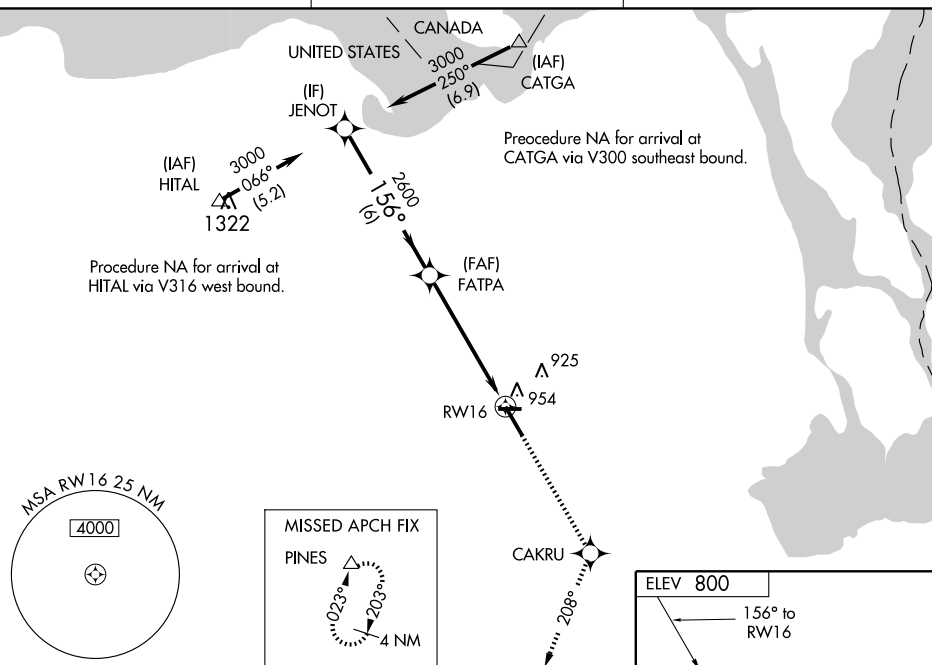


MISSED APPROACH: Climb to 3000 direct CAKRU and right turn via track 208° to PINES and hold.

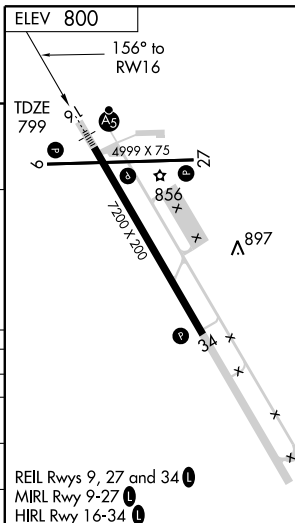
AWOS-3
127.575

TORONTO CENTER
132.65 344.5

UNICOM
123.0 (CTAF) 0



JENOT				
3000				
Procedure Turn NA				
GS 3.00° TCH 58				
FATPA				
2600				
* 1.1 NM to RW16				
* LNAV only				
RW16				
6 NM 4.3 NM 1.1				
CATEGORY	A	B	C	D
LPV DA	1068-½ 269 (300-½)			
LNAV/VNAV DA	1204-1 405 (500-1)			
LNAV MDA	1220-½ 421 (500-½)		1220-¾ 421 (500-¾)	1220-1 421 (500-1)
CIRCLING	1260-1 460 (500-1)		1260-1½ 460 (500-1½)	1360-2 560 (600-2)



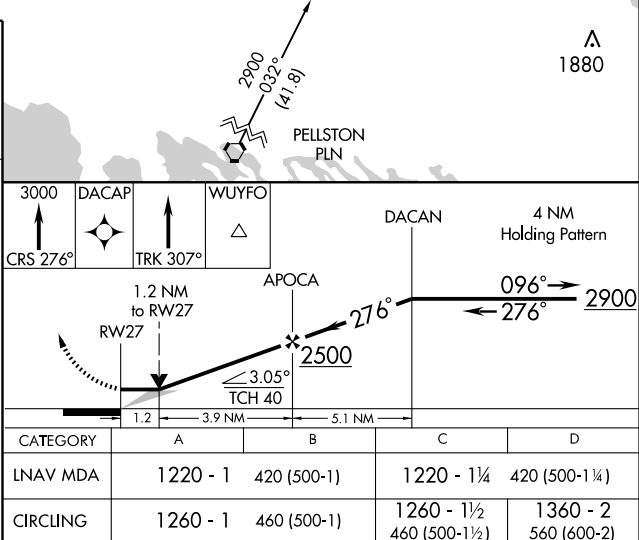
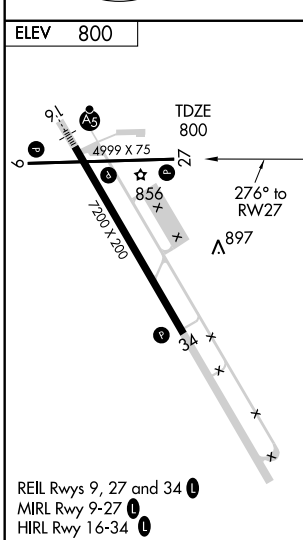
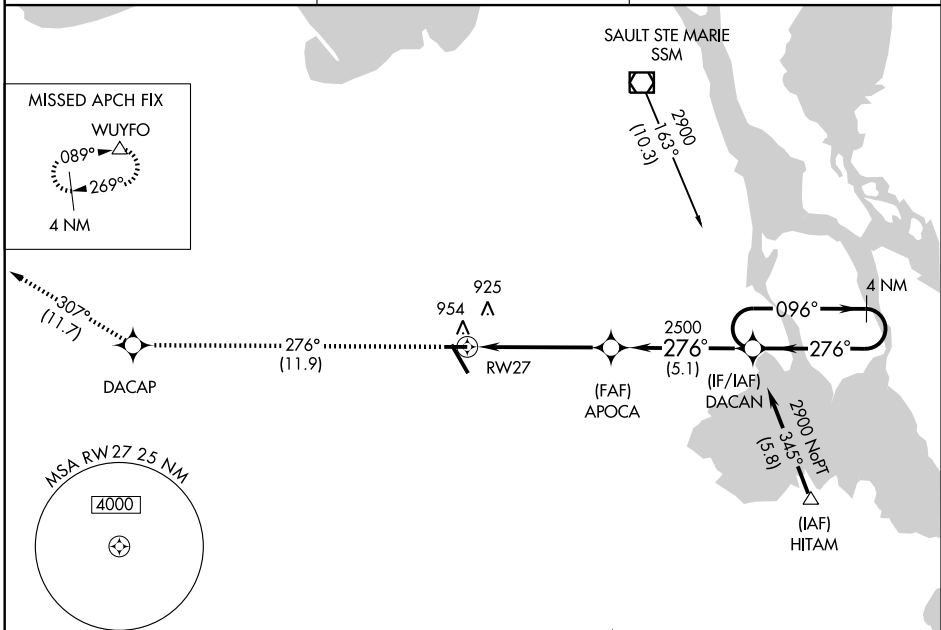
APP CRS 276°	Rwy Idg TDZE Apt Elev	4999 800 800
------------------------	-----------------------------	---

RNAV (GPS) RWY 27

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

▲ NA Straight-in minimums NA at night. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.	MISSED APPROACH: Climb to 3000 via 276° course to DACAP WP and via 307° track to WUYFO WP and hold.
---	---

AWOS-3 127.575	TORONTO CENTER 132.65 344.5	UNICOM 123.0 (CTAF) 0
--------------------------	---------------------------------------	---------------------------------



SAULT STE MARIE, MICHIGAN

Orig 09351

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

RNAV (GPS) RWY 27

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

WAAS CH 56315 W34A	APP CRS 336°	Rwy Idg TDZE Apt Elev	7200 796 800
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 34

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

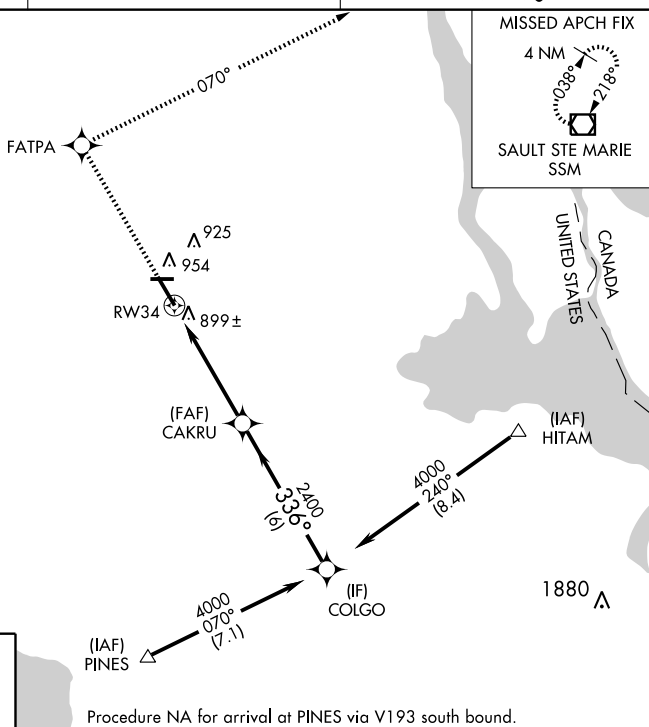
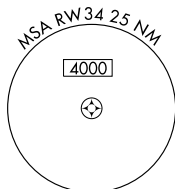
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson Field altimeter setting and increase all DA 45 feet and all MDA 60 feet; increase LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Sault Ste Marie Muni/Sanderson Field altimeter setting.

MISSED APPROACH: Climb to 3000 direct FATPA and right turn via track 070° to SSM VOR/DME and hold.

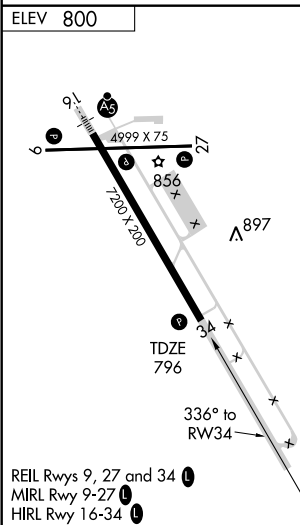
AWOS-3
127,575

TORONTO CENTER
132.65 344.5

UNICOM
123.0 (CTAF) 0



Procedure NA for arrival at PINES via V193 south bound.



COLGO

4000

Procedure Turn NA

GS 3.00°
TCH 40

336°

2400

6 NM

3.7 NM

1.2 NM

CAKRU

*1.2 NM to RW34

*LNAV only

RW34

3000

FATPA

SSM

TRK 070°

CATEGORY	A	B	C	D
LPV DA	1046-1		250 (300-1)	
LNAV/ VNAV DA	1198-1½		402 (400-1½)	
LNAV MDA	1200-1	404 (400-1)	1200-1¼	404 (400-1¼)
CIRCLING	1260-1	460 (500-1)	1260-1½ 460 (500-1½)	1360-2 560 (600-2)

VOR/DME SSM 112.2 Chan 59	APP CRS 218°	Rwy Idg TDZE Apt Elev 800	N/A N/A 800
---	------------------------	---	--

VOR-A

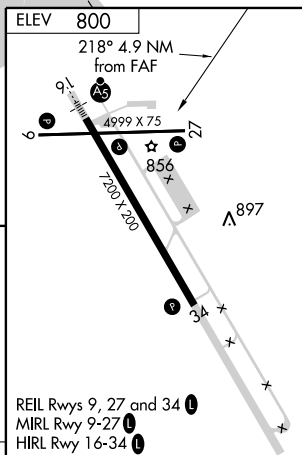
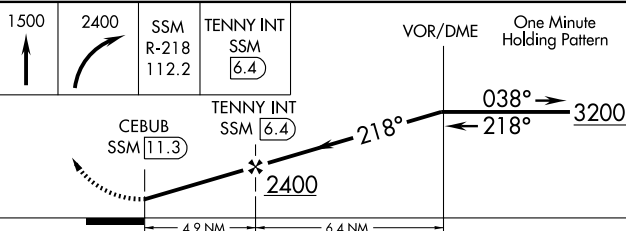
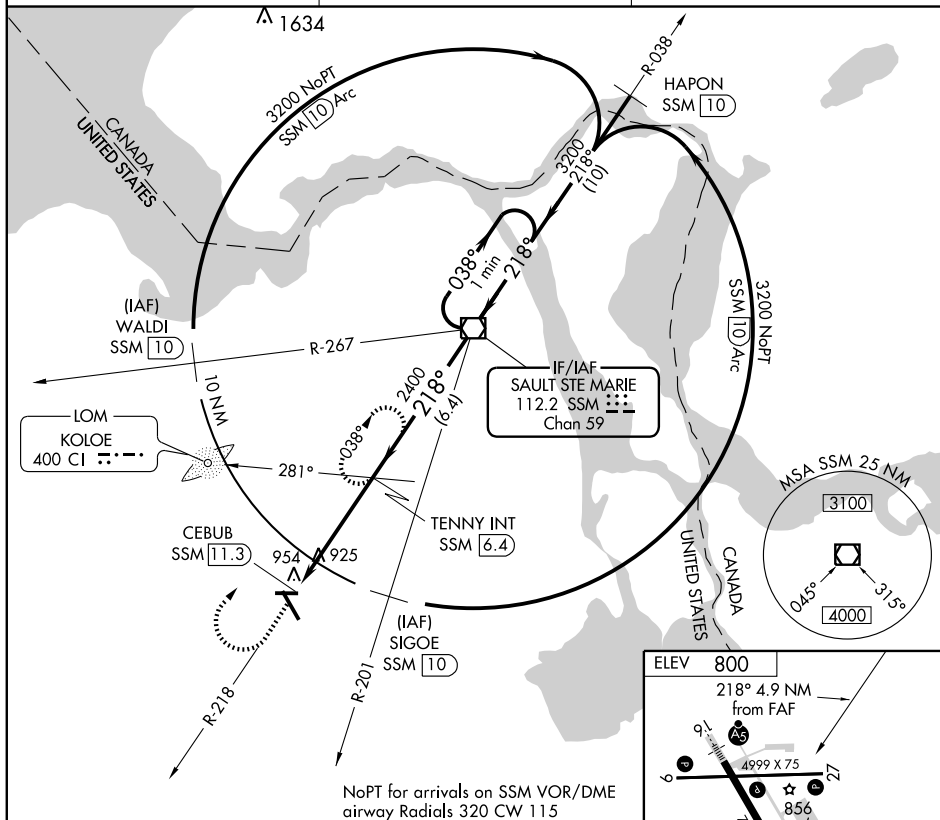
SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

T DME or ADF REQUIRED. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson **A** Field altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 1500 then climbing right turn to 2400 via SSM R-218 to TENNY Int/6.4 DME and hold.

AWOS-3
127.575

TORONTO CENTER
132.65 344.5

UNICOM
123.0 (CTAF) **L**

CATEGORY	A	B	C	D
CIRCLING	1260-1	460 (500-1)	1260-1½ 460 (500-1½)	1360-2 560 (600-2)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SAULT STE MARIE, MICHIGAN

Amdt 7 22OCT09

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

VOR-A

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010

SIDNAW

PRICKETT-GROOMS FLD (6Y9) 1 NE UTC-5(-4DT) N46°31.52' W88°42.35'

GREEN BAY

1372 NOTAM FILE GRB

RWY 10-28: 2600X100 (TURF)**RWY 10:** Thld dspcd 300'. Trees.**RWY 28:** Trees.**AIRPORT REMARKS:** Unattended. Rws not plowed. Arpt CLOSED Nov-Apr and when snow covered. Rwy 10-28 sfc soft when wet, call 906-355-2257 to verify condition. Rwy 10-28 marked with 3' yellow cones. Rwy 28 +30' trees, 30' both sides of rwy, 300' from rwy end.**COMMUNICATIONS:** CTAF 122.9**SILVER CITY AIRPARK** (See ALPENA)**SKYWAY ESTATES** (See EATON RAPIDS)**SOUTH HAVEN AREA RGNL** (LWA) 3 S UTC-5(-4DT) N42°21.07' W86°15.34'

CHICAGO

666 B S4 **FUEL** 100LL, JET A NOTAM FILE LAN

L-281

RWY 04-22: H4801X75 (ASPH) S-12 MIRL 0.3% up NE

IAP

RWY 04: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Trees.**RWY 22:** REIL. PAPI (P4L)—GA 3.5° TCH 33'. Tree.**RWY 14-32:** 3275X190 (TURF)**RWY 14:** Thld dspcd 963'. Trees.**RWY 32:** Thld dspcd 762'. Tree.**AIRPORT REMARKS:** Attended 1400-2200Z±. Deer on and invof arpt. Rwy 14 and Rwy 32 dspcd thlds marked with three 3' yellow cones. MIRL Rwy 04-22 preset low ints; dusk-0400Z±; to increase ints and ACTIVATE REIL and PAPI Rwy 04 and Rwy 22—CTAF. After 0400Z± ACTIVATE CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.025 (269)637-7016.**COMMUNICATIONS:** CTAF/UNICOM 122.8**PULLMAN RCO** 122.1R, 112.1T (LANSING RADIO)**SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z±, Sat 1030-0445Z±, other times ctc)**CHICAGO CENTER APP/DEP CON** 128.5**GCO** 121.725 (FLIGHT SERVICES)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.**PULLMAN (H) VOR/DME** 112.1 PMM Chan 58 N42°27.96' W86°06.29' 224° 9.6 NM to fld. 640/00E.**SOUTHWEST MICHIGAN RGNL** (See BENTON HARBOR)

SPARTA

PAUL C. MILLER-SPARTA (8D4) 3 SE UTC-5(-4DT) N43°07.63' W85°40.70'

CHICAGO

775 B S4 **FUEL** 100LL, MOGAS NOTAM FILE LAN

L-281

RWY 07-25: H4033X75 (ASPH) S-24 MIRL

IAP

RWY 07: REIL. PAPI(P2L)—GA 3.5° TCH 22'. Trees.**RWY 25:** REIL. PAPI(P2R)—GA 3.5° TCH 27'. Trees. 0.7% up W.**AIRPORT REMARKS:** Attended irregularly. Powered parachute ops north side of rwy. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and PAPI Rwy 07-25—CTAF.**WEATHER DATA SOURCES:** AWOS-A 132.95 (616) 887-2039. ASOS-A 122.8 (616) 887-2039.**COMMUNICATIONS:** CTAF/UNICOM 122.8® **GRAND RAPIDS APP/DEP CON** 124.6 (1030-0500Z±)**CHICAGO CENTER APP/DEP CON** 128.5 (0500-1030Z±)**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.**MUSKEGON (L) VORTACW** 115.2 MKG Chan 99 N43°10.16' W86°02.36' 100° 16.1 NM to fld. 659/1W.

HIWAS.

SPENC N42°13.20' W83°12.20' NOTAM FILE DTW.

DETROIT

NDB (LOM) 223 DM 272° 6.7 NM to Detroit Metropolitan Wayne Co.

A

STAMBAUGH (See IRON RIVER)

STANWOOD

CAIN FLD (38C) 2 SE UTC-5(-4DT) N43°36.00' W85°29.59'

CHICAGO

889 S4 NOTAM FILE LAN

RWY 18-36: 3450X100 (TURF)**RWY 18:** Thld dspcd 486'. Trees.**RWY 36:** Thld dspcd 384'. Tree.**AIRPORT REMARKS:** Attended irregularly. Fuel avbl for emergencies only. Radio control acft activity on and invof arpt. Occasional deer activity on and invof arpt. Rwy 18-36 and dspcd thlds marked with 3' yellow cones.**COMMUNICATIONS:** CTAF 122.9**STURGIS** N41°48.79' W85°26.03' NOTAM FILE IRS.

CHICAGO

NDB (MHW) 382 IRS at Kirsch Muni.

L-281

APP CRS	Rwy Idg	4801
047°	TDZE	659
	Apt Elev	666

RNAV (GPS) RWY 4

SOUTH HAVEN AREA RGNL (LWA)

T When local altimeter setting not received, use South Bend altimeter setting and increase all MDA 120 feet. Increase LNAV visibility Cat C $\frac{1}{4}$ mile, Cat D $\frac{1}{2}$ mile and Circling visibility Cat D $\frac{1}{4}$ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA

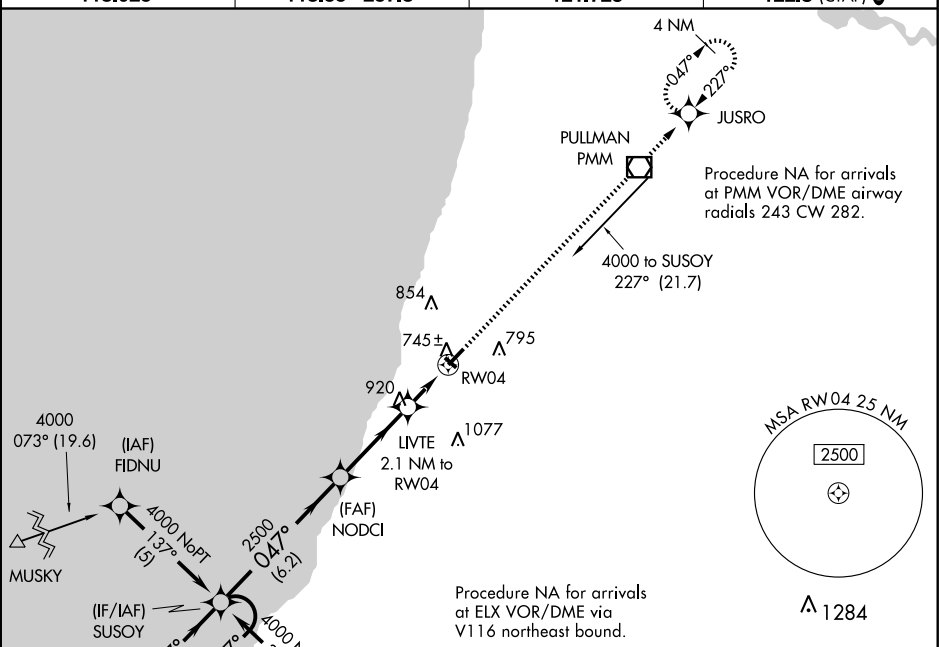
MISSED APPROACH: Climb to 4000 direct JUSRO and hold. Continue climb-in-hold to 4000.

AWOS-3
118.025

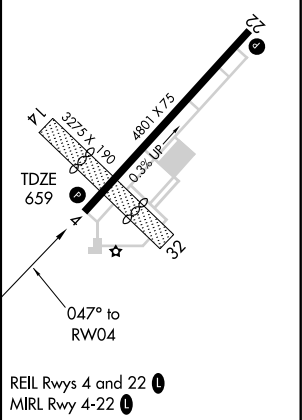
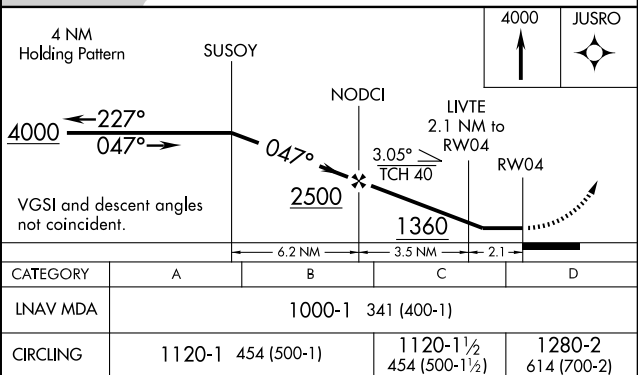
SOUTH BEND APP CON ★
118.55 257.8

GCO
121.725

UNICOM
122.8 (CTAF) **L**



ELEV 666



APP CRS 227°	Rwy Idg 4801
	TDZE 665
	Apt Elev 666

RNAV (GPS) RWY 22

SOUTH HAVEN AREA RGNL (LWA)

When local altimeter setting not received, use South Bend altimeter setting and increase all MDA 120 feet. Increase LNAV Cat C, D visibility ½ mile, and Circling Cat D visibility ¼ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4000 direct SUSOY and hold. Continue climb-in-hold to 4000.

AWOS-3
118.025

SOUTH BEND APP CON ★
118.55 257.8

GCO
121.725

UNICOM
122.8 (CTAF) ①

Procedure NA for arrivals at RAINE via V215 southwest bound.

4000 087° (16)
RAINE

4000 194° (19.2)
ZEELE
(IAF) HENAG
4000 NoPT 131° (5)
047°
227°
1169 ±

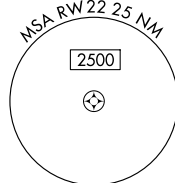
Procedure NA for arrivals at ZEELE via V55 northbound.

4 NM

(FAF) KIDTE
PIXOE 2.5 NM to RW22
854
RW22
920
795
809 ±
1077

2500 227° (6.2)
(IF/IAF) JUSRO
4000 NoPT 317° (5)
(IAF) COTUP

4000 269° (17.2)
OSEGO



SUSOY

407°
227°
4 NM

Procedure NA for arrivals at ELX VOR/DME airway radials 002 CW 077.

4000 to COTUP 022° (18.8)
KEELER ELX

4000
SUSOY

PIXOE 2.5 NM to RW22

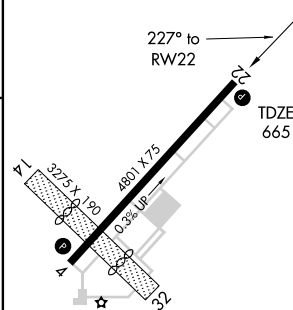
KIDTE

JUSRO

4 NM Holding Pattern

227°
047°
4000
2500
1500
3.05° TCH 40
2.5 NM 3.1 NM 6.2 NM
RW22
VGSI and descent angles not coincident.

ELEV 666



CATEGORY	A	B	C	D
LNAV MDA	1060-1 395 (400-1)			1060-1¼ 395 (400-1¼)
CIRCLING	1120-1 454 (500-1)	1120-1½ 454 (500-1½)		1280-2 614 (700-2)

REIL Rwy 4 and 22 ①
MIRL Rwy 4-22 ①

VOR/DME PMM 112.1 Chan 58	APP CRS 224°	Rwy Idg 4801 TDZE 665 Apt Elev 666
---	------------------------	---

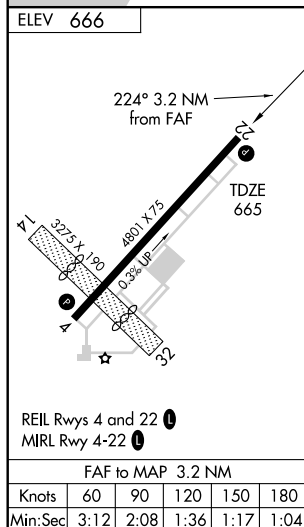
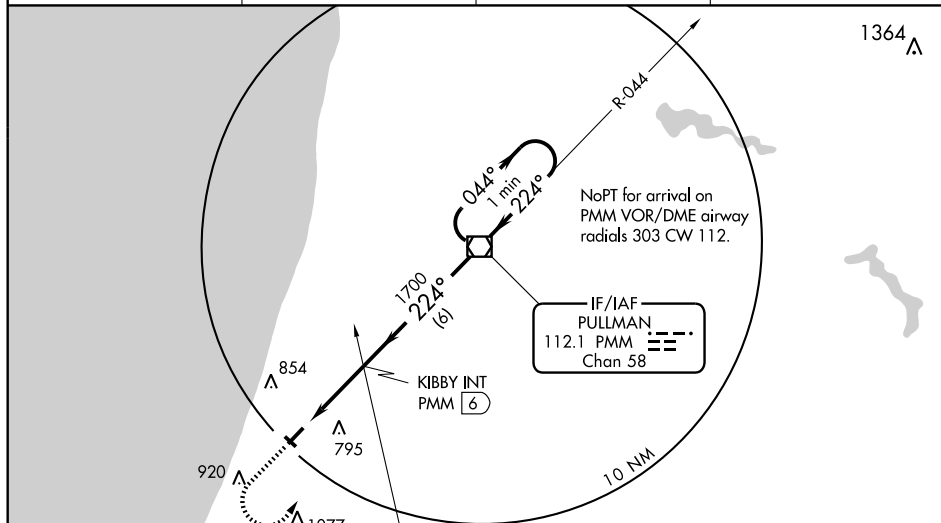
VOR RWY 22



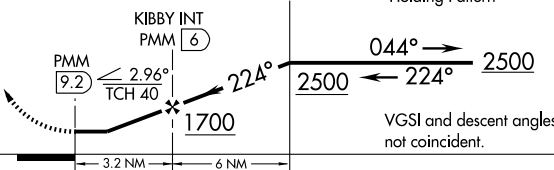
SOUTH HAVEN AREA RGNL (LWA)

⚠ When local altimeter setting not received, use South Bend altimeter setting and increase all MDA 120 feet. Increase S-22 visibility Cat C ¼ mile, Cat D ½ mile and Circling Cat D ¼ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 direct PMM VOR/DME and hold.

AWOS-3 118.025	SOUTH BEND APP CON ★ 118.55 257.8	GCO 121.725	UNICOM 122.8 (CTAF) 0
--------------------------	---	-----------------------	--



<div>2500</div> <div>↑</div>	<div>4000</div> <div></div>	<div>PMM</div> <div></div> <div>112.1</div>	<div>VOR/DME</div> <div>One Minute Holding Pattern</div> <div></div>			
<div>CATEGORY</div>			<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>
<div>S-22</div>			<div>1080-1</div>	<div>415 (500-1)</div>	<div>1080-1¼ 415 (500-1¼)</div>	
<div>CIRCLING</div>			<div>1120-1</div>	<div>454 (500-1)</div>	<div>1120-1½ 454 (500-1½)</div>	<div>1280-2 614 (700-2)</div>

SOUTH HAVEN, MICHIGAN

Amdt 10 09351

SOUTH HAVEN AREA RGNL (LWA)

42°21'N - 86°15'W

VOR RWY 22

SIDNAW

PRICKETT-GROOMS FLD (6Y9) 1 NE UTC-5(-4DT) N46°31.52' W88°42.35'

GREEN BAY

1372 NOTAM FILE GRB

RWY 10-28: 2600X100 (TURF)**RWY 10:** Thld dspcd 300'. Trees.**RWY 28:** Trees.**AIRPORT REMARKS:** Unattended. Rws not plowed. Arpt CLOSED Nov-Apr and when snow covered. Rwy 10-28 sfc soft when wet, call 906-355-2257 to verify condition. Rwy 10-28 marked with 3' yellow cones. Rwy 28 +30' trees, 30' both sides of rwy, 300' from rwy end.**COMMUNICATIONS:** CTAF 122.9**SILVER CITY AIRPARK** (See ALPENA)**SKYWAY ESTATES** (See EATON RAPIDS)**SOUTH HAVEN AREA RGNL** (LWA) 3 S UTC-5(-4DT) N42°21.07' W86°15.34'

CHICAGO

666 B S4 **FUEL** 100LL, JET A NOTAM FILE LAN

L-281

RWY 04-22: H4801X75 (ASPH) S-12 MIRL 0.3% up NE

IAP

RWY 04: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Trees.**RWY 22:** REIL. PAPI (P4L)—GA 3.5° TCH 33'. Tree.**RWY 14-32:** 3275X190 (TURF)**RWY 14:** Thld dspcd 963'. Trees.**RWY 32:** Thld dspcd 762'. Tree.**AIRPORT REMARKS:** Attended 1400-2200Z±. Deer on and invof arpt. Rwy 14 and Rwy 32 dspcd thlds marked with three 3' yellow cones. MIRL Rwy 04-22 preset low ints; dusk-0400Z±; to increase ints and ACTIVATE REIL and PAPI Rwy 04 and Rwy 22—CTAF. After 0400Z± ACTIVATE CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.025 (269)637-7016.**COMMUNICATIONS:** CTAF/UNICOM 122.8**PULLMAN RCO** 122.1R, 112.1T (LANSING RADIO)**SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z±, Sat 1030-0445Z±, other times ctc)**CHICAGO CENTER APP/DEP CON** 128.5**GCO** 121.725 (FLIGHT SERVICES)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.**PULLMAN (H) VOR/DME** 112.1 PMM Chan 58 N42°27.96' W86°06.29' 224° 9.6 NM to fld. 640/00E.**SOUTHWEST MICHIGAN RGNL** (See BENTON HARBOR)

SPARTA

PAUL C. MILLER-SPARTA (8D4) 3 SE UTC-5(-4DT) N43°07.63' W85°40.70'

CHICAGO

775 B S4 **FUEL** 100LL, MOGAS NOTAM FILE LAN

L-281

RWY 07-25: H4033X75 (ASPH) S-24 MIRL

IAP

RWY 07: REIL. PAPI(P2L)—GA 3.5° TCH 22'. Trees.**RWY 25:** REIL. PAPI(P2R)—GA 3.5° TCH 27'. Trees. 0.7% up W.**AIRPORT REMARKS:** Attended irregularly. Powered parachute ops north side of rwy. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and PAPI Rwy 07-25—CTAF.**WEATHER DATA SOURCES:** AWOS-A 132.95 (616) 887-2039. ASOS-A 122.8 (616) 887-2039.**COMMUNICATIONS:** CTAF/UNICOM 122.8® **GRAND RAPIDS APP/DEP CON** 124.6 (1030-0500Z±)**CHICAGO CENTER APP/DEP CON** 128.5 (0500-1030Z±)**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.**MUSKEGON (L) VORTACW** 115.2 MKG Chan 99 N43°10.16' W86°02.36' 100° 16.1 NM to fld. 659/1W.

HIWAS.

SPENC N42°13.20' W83°12.20' NOTAM FILE DTW.

DETROIT

NDB (LOM) 223 DM 272° 6.7 NM to Detroit Metropolitan Wayne Co.

A

STAMBAUGH (See IRON RIVER)

STANWOOD

CAIN FLD (38C) 2 SE UTC-5(-4DT) N43°36.00' W85°29.59'

CHICAGO

889 S4 NOTAM FILE LAN

RWY 18-36: 3450X100 (TURF)**RWY 18:** Thld dspcd 486'. Trees.**RWY 36:** Thld dspcd 384'. Tree.**AIRPORT REMARKS:** Attended irregularly. Fuel avbl for emergencies only. Radio control acft activity on and invof arpt. Occasional deer activity on and invof arpt. Rwy 18-36 and dspcd thlds marked with 3' yellow cones.**COMMUNICATIONS:** CTAF 122.9**STURGIS** N41°48.79' W85°26.03' NOTAM FILE IRS.

CHICAGO

NDB (MHW) 382 IRS at Kirsch Muni.

L-281

APP CRS	Rwy Idg	4033
066°	TDZE	775
	Apt Elev	775

RNAV (GPS) RWY 7

SPARTA / PAUL C. MILLER - SPARTA (8D4)

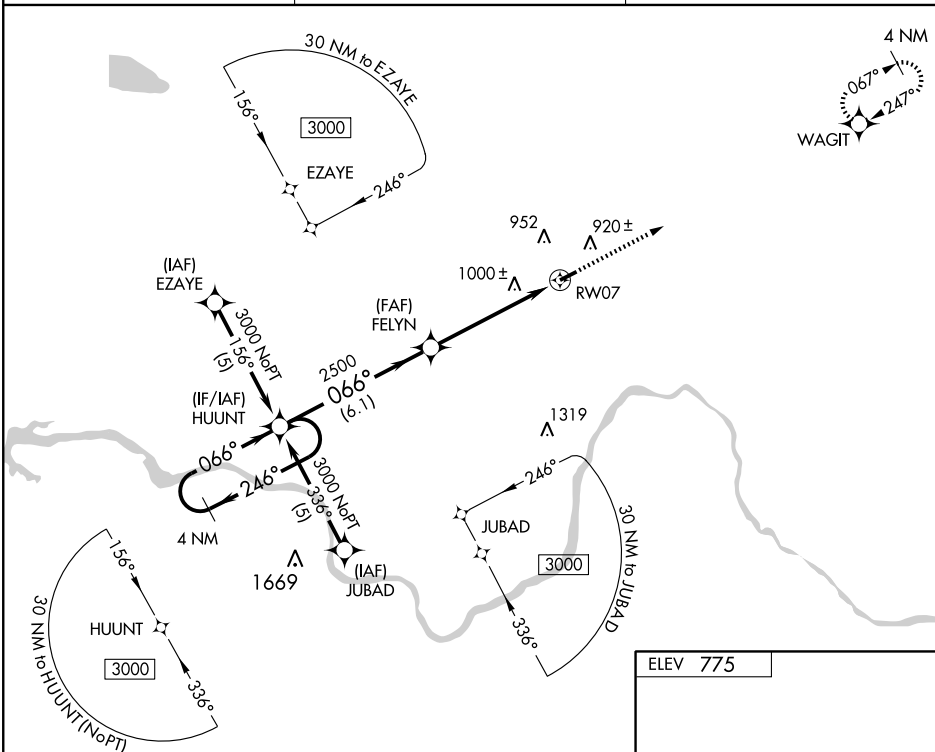
▽ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000
 direct WAGIT and hold.

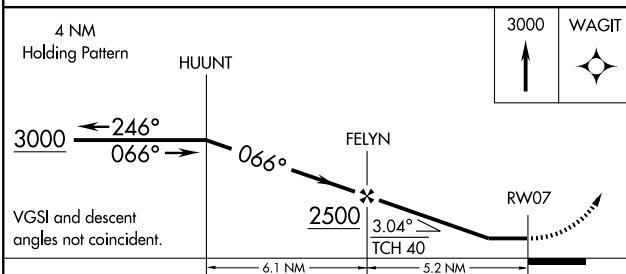
ASOS-A
122.8

GRAND RAPIDS APP CON ★
124.6 257.6

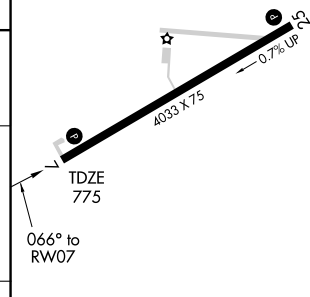
UNICOM
122.8 (CTAF) ①



ELEV 775



3000 WAGIT
 ↑



CATEGORY	A	B	C	D
LNAV MDA	1340-1	565 (600-1)	NA	NA
CIRCLING	1340-1	565 (600-1)	NA	NA

MIRL Rwy 7-25 ①
 REIL Rwy 7 and 25

APP CRS 247°	Rwy Idg TDZE Apt Elev	4033 775 775
------------------------	-----------------------------	---

RNAV (GPS) RWY 25

SPARTA / PAUL C. MILLER - SPARTA (8D4)

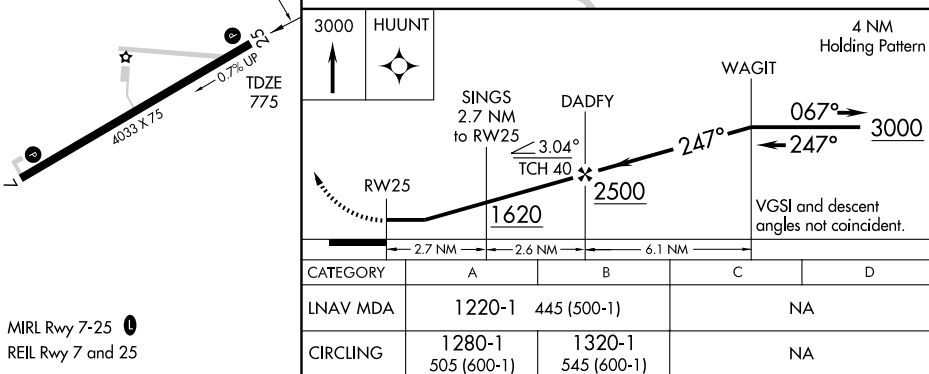
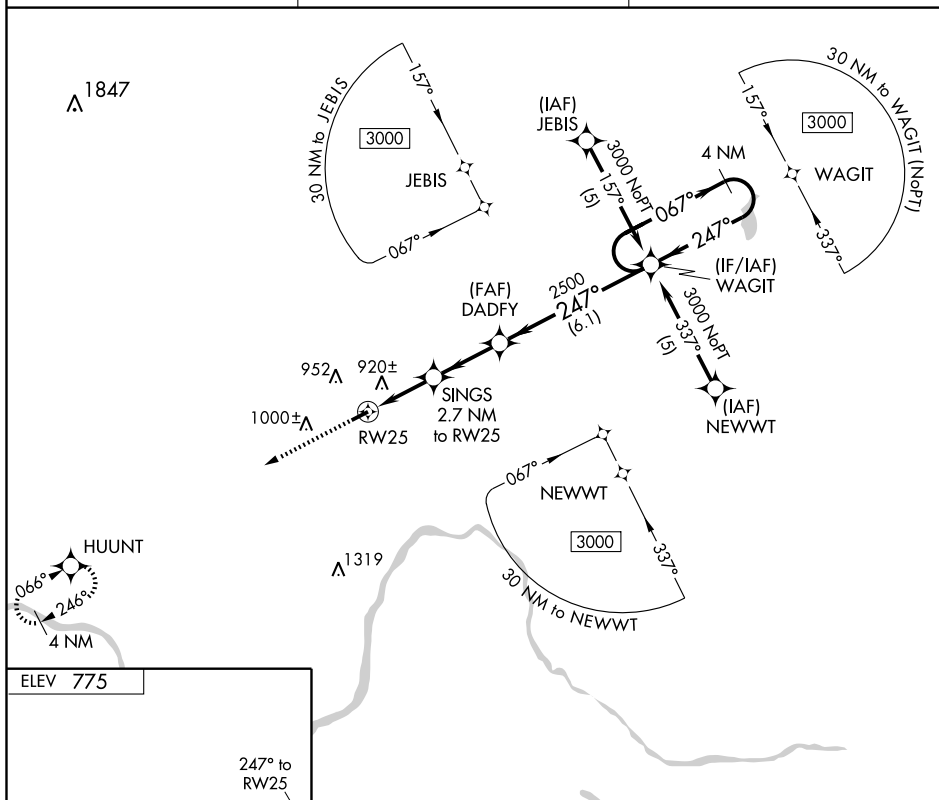
▽ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000 direct HUUNT and hold.

ASOS-A
122.8

GRAND RAPIDS APP CON ★
124.6 257.6

UNICOM
122.8 (CTAF)



MIRL Rwy 7-25 **0**
REIL Rwy 7 and 25

VORTAC MKG 115.2 Chan 99	APP CRS 280°	Rwy Idg TDZE Apt Elev N/A N/A 775
--	------------------------	---

VOR-A

SPARTA / PAUL C. MILLER - SPARTA (8D4)

V When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.


MISSED APPROACH: Climb to 2500 then right turn via heading 119° and MKG R-100 to EATUN INT/MKG 21 DME and hold.

ASOS-A
122.8

GRAND RAPIDS APP CON ★
124.6 257.6

UNICOM
122.8 (CTAF) 0

△
1847

MUSKEGON
115.2 MKG 
Chan 99

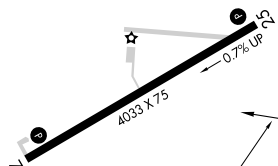
2500 to EATUN
100°
(21)

MSA MKG 25 NM

2900

ELEV 775

GRAND RAPIDS
115.95 GRR 
Chan 106 (Y)



280° 4.7 NM
from FAF

MIRL Rwy 7-25 0
REIL Rwy 7 and 25

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

2500

HDG 119°
MKG R-100
115.2

EATUN
INT

EATUN INT
MKG 21

Remain
within 10 NM

MAHXY
MKG 16.3

100°
280°
2500

2500

4.7 NM

CATEGORY	A	B	C	D
CIRCLING	1360-1	585 (600-1)		NA

ST IGNACE

MACKINAC CO (83D) 2 NW UTC-5(-4DT) N45°53.49' W84°44.29'

LAKE HURON

624 B S4 FUEL 100LL NOTAM FILE GRB

L-31B

RWY 07-25: H3800X75 (CONC) S-24 MRL 0.4% up SW

IAP

RWY 07: REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 21'. Road.

AIRPORT REMARKS: Attended dawn-dusk. After hours 906-643-7161 (manager residence). Deer and birds on and invof arpt. ACTIVATE MRL Rwy 07-25 and PAPI Rwy 07 and 25 and REIL Rwy 07 and 25 and ramp lgts—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

MACKINAC ISLAND RCO 122.35 (GREEN BAY RADIO)

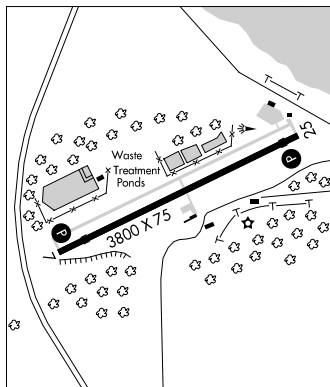
⑧ **MINNEAPOLIS CENTER APP/DEP CON** 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 355° 16.0 NM to fld. 840/6W. HIWAS.

COMM/NAV/WEATHER REMARKS: Mackinac Island (MCD) AWOS 118.27 can be received on the ground.



ST JAMES N45°41.60' W85°33.52' NOTAM FILE SJX.

GREEN BAY

NDB (MHW) 382 SJX at Beaver Island. Unmonitored.

L-31B

ST JOHNS

ARCHER MEML FLD (2S3) 7 SE UTC-5(4DT) N42°54.42' W84°28.33'

DETROIT

794 TPA—1600(806) NOTAM FILE LAN

RWY 17-35: 2496X110 (TURF)

RWY 35: Thld displcd 1145'.

AIRPORT REMARKS: Attended May-Nov irregularly. No snow removal. Rwy 17 thld may be obstructed by 8' corn during growing season. Rwy 17-35 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

GLOWACKI (97G) 2 W UTC-5(4DT) N43°00.00' W84°35.75'

DETROIT

775 NOTAM FILE LAN

RWY 09-27: 1528X100 (TURF)

RWY 09: Trees. RWY 27: Building.

AIRPORT REMARKS: Attended irregularly. 15' tree N side of rwy on rwy edge, 132' E of Rwy 09. Rwy 27 terrain slopes downward E to W; Rwy soft in spring. Radio control acft ops on arpt. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

RANDOLPH'S LANDING AREA (61G) 7 NE UTC-5(-4DT) N43°06.75' W84°31.25'

DETROIT

700 NOTAM FILE LAN

RWY 05-23: 2175X100 (TURF)

RWY 05: Thld displcd 767'. Road.

AIRPORT REMARKS: Attended irregularly. Deer on and invof arpt. Rwy 23 3' fence L side 65' from centerline. Rwy 05-23 and displcd thlds marked with yellow tires; Rwy 05 displcd thld marked with 6 yellow tires 3 each side.

COMMUNICATIONS: CTAF 122.9

SCHIFFER ACRES (3S5) 4 E UTC-5(-4DT) N43°02.15' W84°26.03'

DETROIT

735 S4 NOTAM FILE LAN

RWY 07-25: 2777X120 (TURF)

RWY 07: Rgt tfc. Trees. RWY 25: Thld displcd 798'. Trees.

AIRPORT REMARKS: Attended irregularly. Power plant repairs are for emerg use only. Extensive summer agricultural ops. Deer and turkeys on and invof rwy. Rwy 07-25 LIRL not for public use. Rwy 25 displaced thld marked by 3 yellow tires each side of rwy. Rwy defined by mowing.

COMMUNICATIONS: CTAF 122.9

APP CRS **074°**
 Rwy Idg **3800**
 TDZE **623**
 Apt Elev **623**

RNAV (GPS) RWY 7
 ST IGNACE / MACKINAC COUNTY (83D)

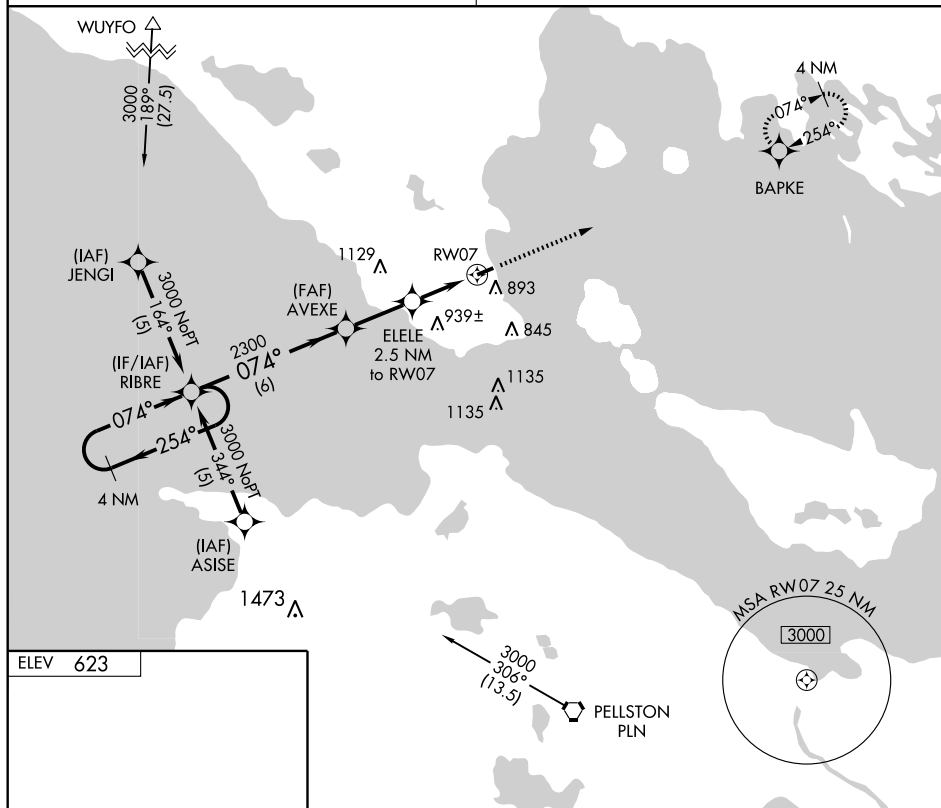


Use Mackinac Island altimeter setting.
 GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
 Circling NA at night south of Rwy 7-25.

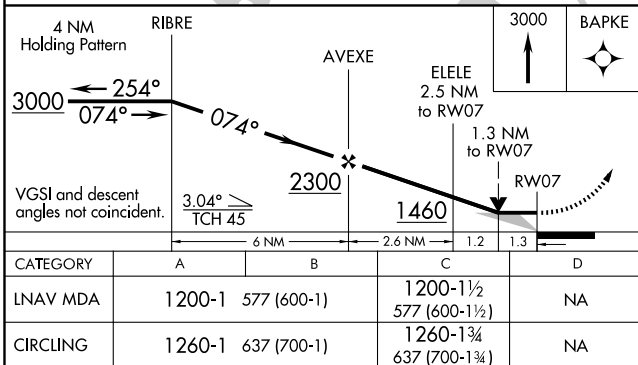
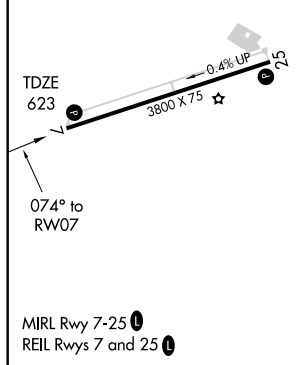
MISSED APPROACH: Climb to 3000
 direct BAPKE WP and hold.

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.7 (CTAF) 0



ELEV **623**



ST IGNACE, MICHIGAN
 Orig-A 07018

45°53'N - 84°44'W

ST IGNACE / MACKINAC COUNTY (83D)
RNAV (GPS) RWY 7

APP CRS	Rwy Idg	3800
254°	TDZE	623
	Apt Elev	623

RNAV (GPS) RWY 25

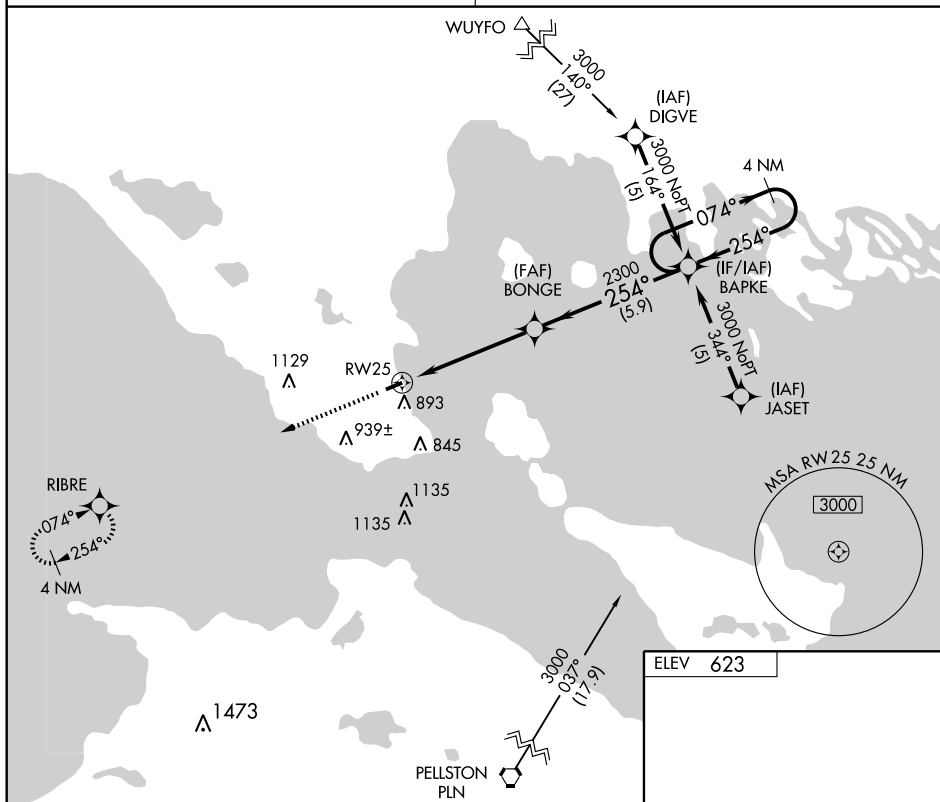
ST IGNACE / MACKINAC COUNTY (83D)


A NA

Use Mackinac Island altimeter setting.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Circling NA at night south of RWY 7-25.

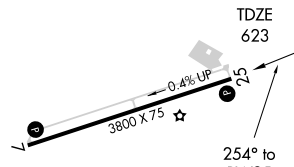
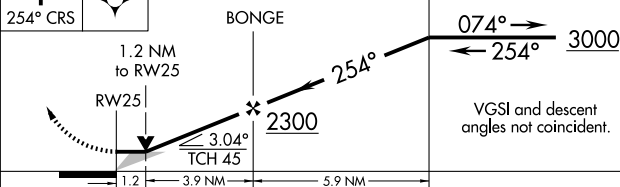
MISSED APPROACH: Climb to 3000 via 254° course to RIBRE WP and hold.

MINNEAPOLIS CENTER
134.6 354.05

UNICOM
122.7 (CTAF) **L**

3000 ↑ 254° CRS	RIBRE 
-----------------------	---

ELEV 623



CATEGORY	A	B	C	D
LNAV MDA	1020-1 397 (400-1)			NA
CIRCLING	1260-1 637 (700-1)		1260-1 637 (700-1)	NA

MIRL Rwy 7-25 **L**
REIL Rwys 7 and 25 **L**

ST IGNACE, MICHIGAN
Orig-A 07018

45°53'N - 84°44'W

ST IGNACE / MACKINAC COUNTY (83D)
RNAV (GPS) RWY 25

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

STURGIS

KIRSCH MUNI (IRS) 2 NW UTC-5(-4DT) N41°48.80' W85°26.34'

CHICAGO

924 B S4 FUEL 100LL, JET A1 + OX 4 TPA-1924(1000) NOTAM FILE IRS

H-5E, 10F, L-281
IAP

RWY 18-36: H5200X100 (ASPH) S-47, D-57.5 2D-90 MIRL

RWY 18: REIL. PAPI(P4L)-GA 3.0° TCH 27'. Trees.

RWY 36: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Trees.

RWY 06-24: H3451X75 (ASPH) S-19, D-25, DT-58 MIRL
0.3% up NE.

RWY 06: Trees.

RWY 24: REIL. PAPI(P2L)-GA 4.0° TCH 22'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 MIRL OTS
indef. ACTIVATE MIRL Rwy 06-24 and Rwy 18-36, REIL Rwy 18
and Rwy 24, PAPI Rwy 24, Rwy 18, and Rwy 36-CTAF.

WEATHER DATA SOURCES: AWOS-3 121.325 (269) 659-8715.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z±)

KALAMAZOO CLNC DEL 133.55

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z±)

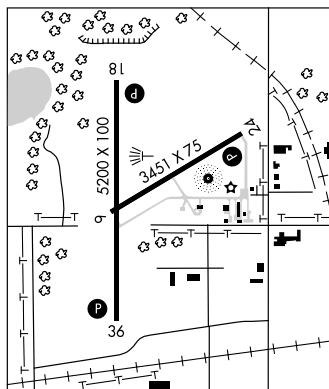
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22'

W85°33.19' 170° 25.9 NM to fld. 870/1W.

STURGIS NDB (MHW) 382 IRS N41°48.79' W85°26.03' at fld.

NOTAM FILE IRS.



SUGAR LOAF RESORT (See TRAVERSE CITY)

SUNFIELD

HIRAM CURE (C43) 2 NE UTC-5(-4DT) N42°46.20' W84°57.90'

DETROIT

853 NOTAM FILE LAN

RWY 09-27: 2314X100 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec thru Mar and when snow covered. Rwy 09-27 soft when
wet. Deer invof rwy. Crops adjacent to rwy. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SUOMI N46°15.71' W87°24.97' NOTAM FILE SAW.

GREEN BAY

NDB (LOM) 410 SO 013° 5.6 NM to Sawyer Intl.

TACKABERRY (See AVOCA)

TECUMSEH

MEYERS-DIVER'S (3TE) 2 N UTC-5(-4DT) N42°01.51' W83°56.35'

DETROIT

815 B S3 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

L-28J

RWY 18: Thld dsplcd 780'. Trees.

RWY 36: Thld dsplcd 500'. Trees. Rgt tfc.

IAP

RWY 09-27: 1820X100 (TURF)

RWY 09: Trees.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Skydiving activity.

Rwy 18-36 pavement cracking. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only.

Rwy 18-36 acft Ind/tkof adjacent W of asph rwy. Area not marked to delineate area being used. Rwy 09-27
marked with tires; Rwy 09 dsplcd thld marked with three tires each side. ACTIVATE LIRL Rwy 18-36-CTAF.

COMMUNICATIONS: CTAF 122.9

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 270° 21.6 NM to fld. 629/3W.

HIWAS.

NDB IRS
382

APP CRS
170°

Rwy Idg	5200
TDZE	914
Apt Elev	924

NDB RWY 18
STURGIS/KIRSCH MUNI (IRS)



When local altimeter setting not received, use Three Rivers altimeter setting and increase all MDA 40 feet, increase S-18 Cat C and D visibility and Circling Cat C ¼ mile. Visibility reduction by helicopters NA.

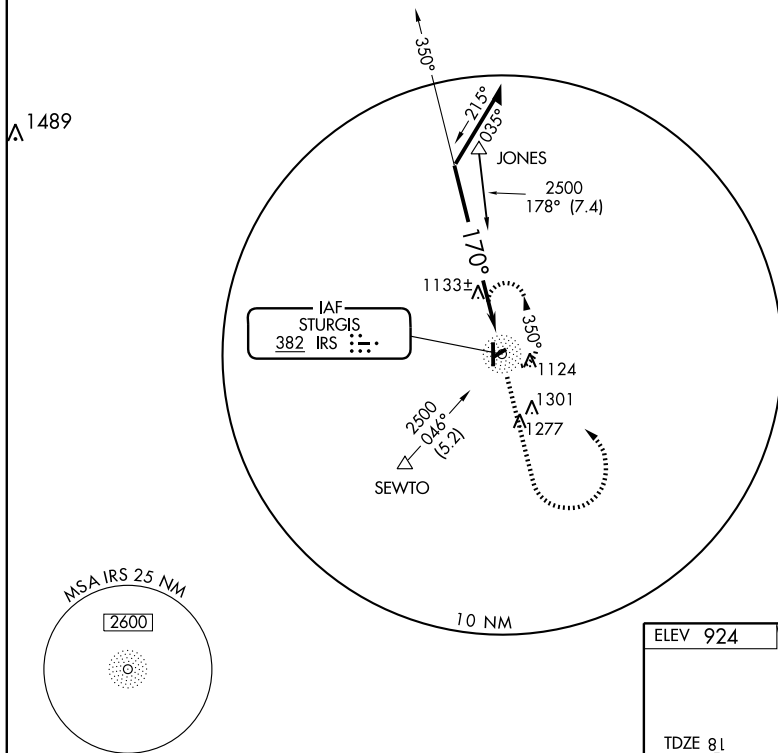
MISSED APPROACH: Climb to 2500 then left turn direct IRS NDB and hold.

AWOS-3
121.325

KALAMAZOO APP CON ★
121.2 340.9

CLNC DEL
133.55

UNICOM
123.05 (CTAF) **L**



Remain
within 10 NM

NDB

2500



TDZE 8 L
914

170° to
IRS NDB

REIL Rwy 18, 24 and 36 **L**
MIRL Rwy 6-24 and 18-36 **L**

STURGIS, MICHIGAN
Amdt 5C 06MAY10

STURGIS/KIRSCH MUNI (IRS)
NDB RWY 18

41°49'N - 85°26'W

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

NDB IRS	APP CRS	Rwy Idg	3451
<u>382</u>	236°	TDZE	924
		Apt Elev	924

NDB RWY 24
STURGIS/KIRSCH MUNI (IRS)

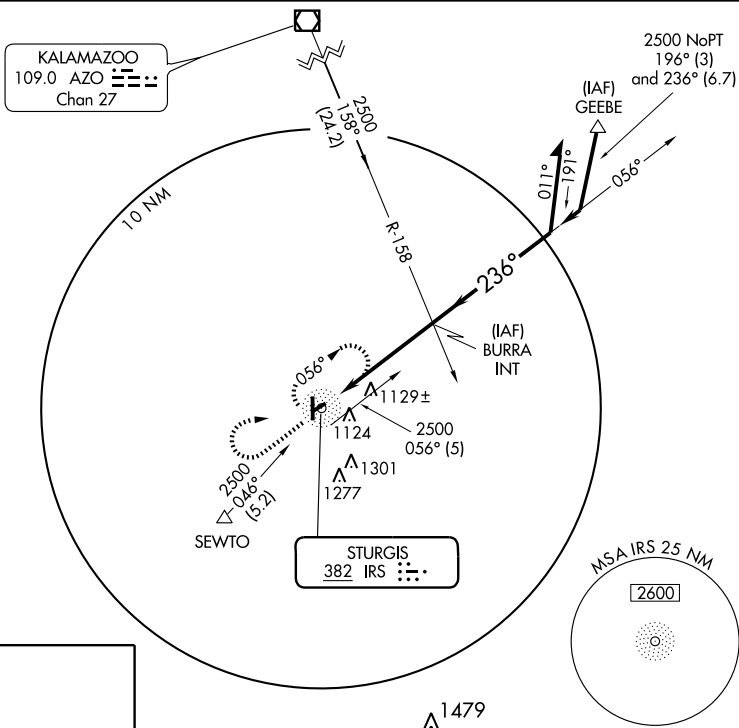
T When local altimeter setting not received, use Three Rivers altimeter setting and increase all MDA 40 feet.

A NA Visibility reduction by helicopters NA.

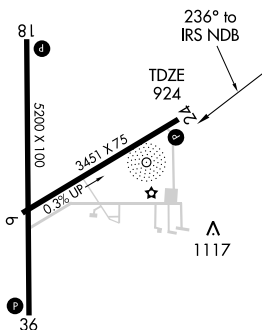
MISSED APPROACH: Climb to 2500 then right turn direct IRS NDB and hold.

AWOS-3
121.325

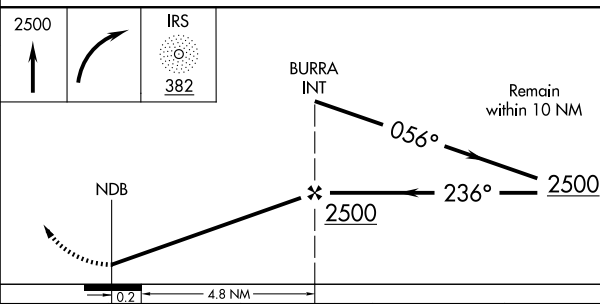
KALAMAZOO APP CON ★
121.2 340.9

CLNC DEL
133.55UNICOM
123.05 (CTAF) **L**

ELEV 924



REIL Rwy 18, 24 and 36 **L**
MIRL Rwy 6-24 and 18-36 **L**



CATEGORY	A	B	C	D
S-24	1480-1	556 (600-1)	1480-1½ 556 (600-1½)	1480-1¾ 556 (600-1¾)
CIRCLING	1480-1	556 (600-1)	1480-1½ 556 (600-1½)	1620-2¼ 696 (700-2¼)

STURGIS, MICHIGAN
Amdt 10C 06MAY10

STURGIS/KIRSCH MUNI (IRS)
NDB RWY 24

41°49'N - 85°26'W

EC-1. 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

APP CRS	Rwy Idg	5200
184°	TDZE	914
	Apt Elev	924

RNAV (GPS) RWY 18

STURGIS/KIRSCH MUNI (IRS)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Three Rivers altimeter setting and increase all MDAs 40 feet and LNAV Cat C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct CAVUP and via 096° track to BRYTO and hold.

AWOS-3
121.325

KALAMAZOO APP CON ★
121.2 340.9

CINC DEL
133.55

UNICOM
123.05 (CTAF) ①

(IAF) RESGY

Procedure NA for arrivals at RESGY via V285 northbound, and via V100 westbound.

Procedure NA for arrivals at GEEBE via V10 eastbound.

(IF) UKANE

(IAF) TEVUJ

GEEBE

▲ 1461

ELEV 924

TDZE 914

184° to RW18

81

5200 X 100

3451 X 75

0.3% UP

36

▲ 1117

REIL Rwy 18, 24 and 36 ①

MIRL Rwy 6-24 and 18-36 ①

1133 ±

RW18

(FAF) ZUGDA

▲ 1124

▲ 1301

▲ 1277

CAVUP

096°

096°

276°

BRYTO

4 NM

MSA RW18 25 NM

2500

UKANE

ZUGDA

3000

CAVUP

096° track

BRYTO

2500
Procedure Turn NA

184°
2500

VGSI and descent angles not coincident.

184°
3.05°
TCH 40

RW18

6.2 NM

4.8 NM

CATEGORY

A

B

C

D

LNAV MDA

1400-1 486 (500-1)

1400-1½ 486 (500-1½)

1400-1½ 486 (500-1½)

CIRCLING

1440-1 516 (600-1)

1440-1½ 516 (600-1½)

1620-2¼ 696 (700-2¼)

WAAS CH 42915 W36A	APP CRS 004°	Rwy Idg TDZE Apt Elev	5200 915 924
--	------------------------	-----------------------------	---

RNAV (GPS) RWY 36

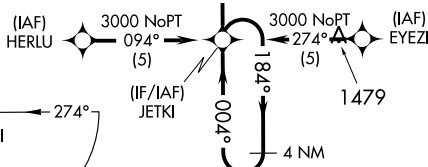
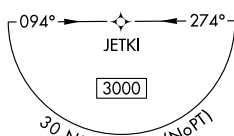
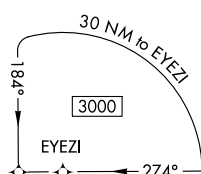
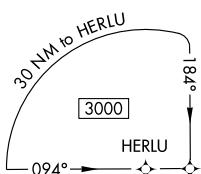
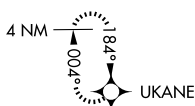
STURGIS/KIRSCH MUNI (IRS)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Three Rivers altimeter setting and increase all DA/MDA 40 feet, increase LNAV/VNAV all Cats and LNAV Cat C/D visibility ¼ mile. VDP NA when using Three Rivers altimeter setting. Baro-VNAV NA when using Three Rivers altimeter setting.

MISSED APPROACH:
Climb to 2500 direct
UKANE and hold.

AWOS-3 121.325	KALAMAZOO APP CON ★ 121.2 340.9	CLNC DEL 133.55	UNICOM 123.05 (CTAF) 0
--------------------------	---	---------------------------	---

MISSED APCH FIX



ELEV 924

4 NM
Holding Pattern

JETKI

VGS1 and RNAV glidepath
not coincident.

2500

UKANE

3000

184°

004°

004°

2500

1.7 NM to RW36

*LNAV only.

GS 3.00°

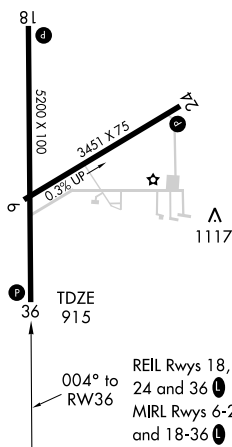
TCH 40

6.1 NM

3.1 NM

1.7

CATEGORY	A	B	C	D
LPV DA	1178-1 263 (300-1)			
LNAV/VNAV DA	1354-1½ 439 (500-1½)			
LNAV MDA	1480-1 565 (600-1)	1480-1½ 565 (600-1½)	1480-1¾ 565 (600-1¾)	
CIRCLING	1480-1 556 (600-1)	1480-1½ 556 (600-1½)	1620-2¼ 696 (700-1¼)	



STURGIS

KIRSCH MUNI (IRS) 2 NW UTC-5(-4DT) N41°48.80' W85°26.34'

CHICAGO

924 B S4 FUEL 100LL, JET A1 + OX 4 TPA-1924(1000) NOTAM FILE IRS

H-5E, 10F, L-281
IAP

RWY 18-36: H5200X100 (ASPH) S-47, D-57.5 2D-90 MIRL

RWY 18: REIL. PAPI(P4L)-GA 3.0° TCH 27'. Trees.

RWY 36: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Trees.

RWY 06-24: H3451X75 (ASPH) S-19, D-25, DT-58 MIRL
0.3% up NE.

RWY 06: Trees.

RWY 24: REIL. PAPI(P2L)-GA 4.0° TCH 22'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 MIRL OTS
indef. ACTIVATE MIRL Rwy 06-24 and Rwy 18-36, REIL Rwy 18
and Rwy 24, PAPI Rwy 24, Rwy 18, and Rwy 36-CTAF.

WEATHER DATA SOURCES: AWOS-3 121.325 (269) 659-8715.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z±)

KALAMAZOO CLNC DEL 133.55

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z±)

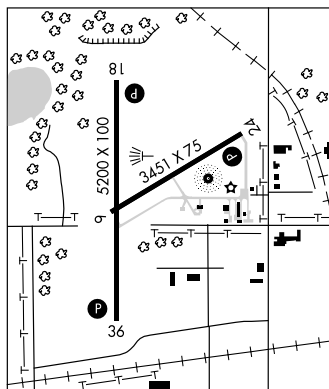
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22'

W85°33.19' 170° 25.9 NM to fld. 870/1W.

STURGIS NDB (MHW) 382 IRS N41°48.79' W85°26.03' at fld.

NOTAM FILE IRS.



SUGAR LOAF RESORT (See TRAVERSE CITY)

SUNFIELD

HIRAM CURE (C43) 2 NE UTC-5(-4DT) N42°46.20' W84°57.90'

DETROIT

853 NOTAM FILE LAN

RWY 09-27: 2314X100 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec thru Mar and when snow covered. Rwy 09-27 soft when
wet. Deer invof rwy. Crops adjacent to rwy. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SUOMI N46°15.71' W87°24.97' NOTAM FILE SAW.

GREEN BAY

NDB (LOM) 410 SO 013° 5.6 NM to Sawyer Intl.

TACKABERRY (See AVOCA)

TECUMSEH

MEYERS-DIVER'S (3TE) 2 N UTC-5(-4DT) N42°01.51' W83°56.35'

DETROIT

815 B S3 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

L-28J

RWY 18: Thld dsplcd 780'. Trees.

RWY 36: Thld dsplcd 500'. Trees. Rgt tfc.

IAP

RWY 09-27: 1820X100 (TURF)

RWY 09: Trees.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Skydiving activity.

Rwy 18-36 pavement cracking. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only.

Rwy 18-36 acft Ind/tkof adjacent W of asph rwy. Area not marked to delineate area being used. Rwy 09-27
marked with tires; Rwy 09 dsplcd thld marked with three tires each side. ACTIVATE LIRL Rwy 18-36-CTAF.

COMMUNICATIONS: CTAF 122.9

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

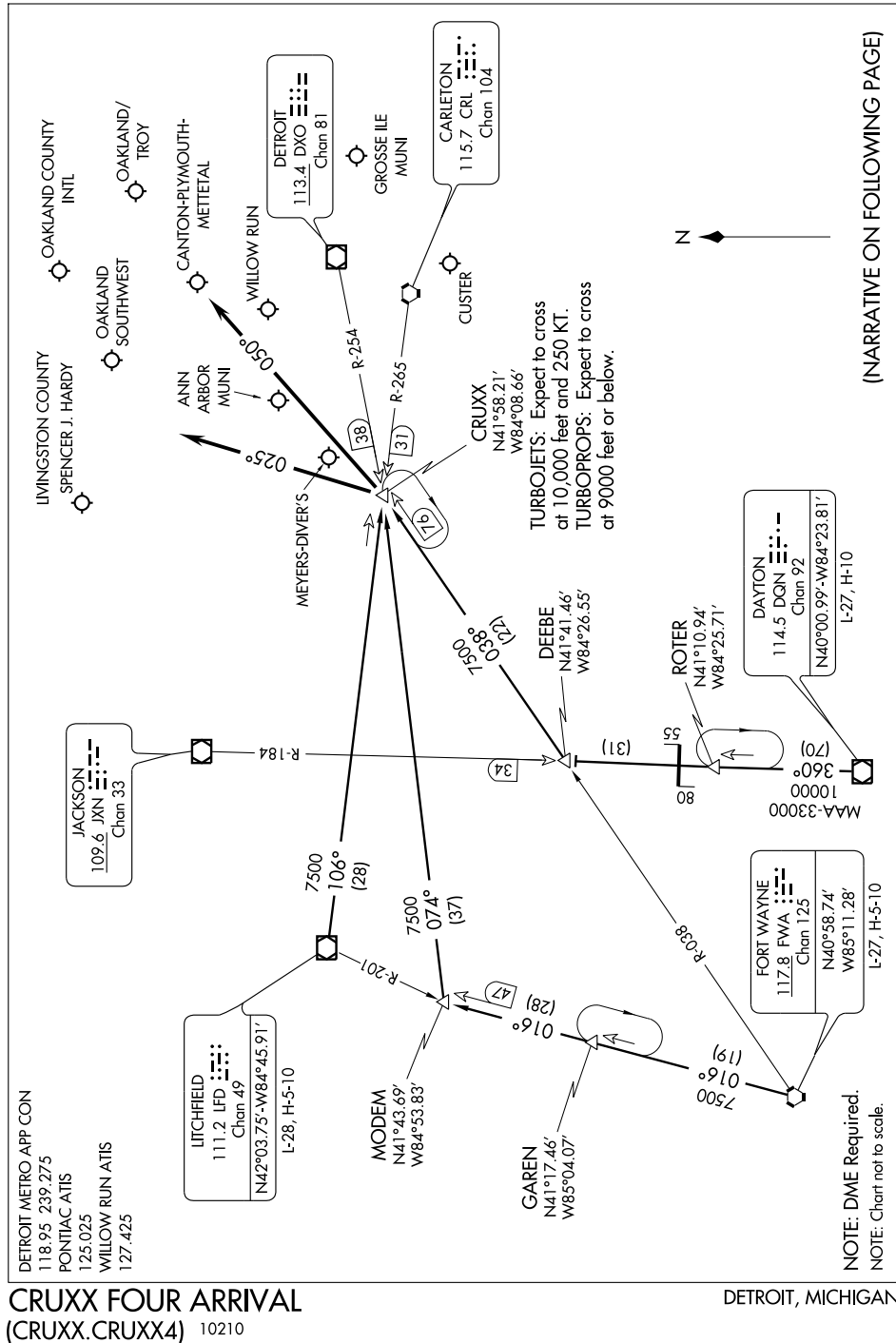
CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 270° 21.6 NM to fld. 629/3W.

HIWAS.

CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010



EC-1, 26 AUG 2010 to 23 SEP 2010

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

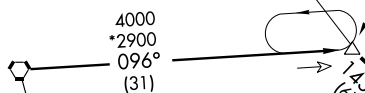
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:
Expect clearance to cross at
9000'.

4000

*2900

096°

(31)

4000

143°

(6)

LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT
113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

SELFRIAGE
ANG BASEOAKLAND COUNTY
INTLOAKLAND/
TROYCANTON-
PLYMOUTH-
METTETALCOLEMAN A.
YOUNG MUNI

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

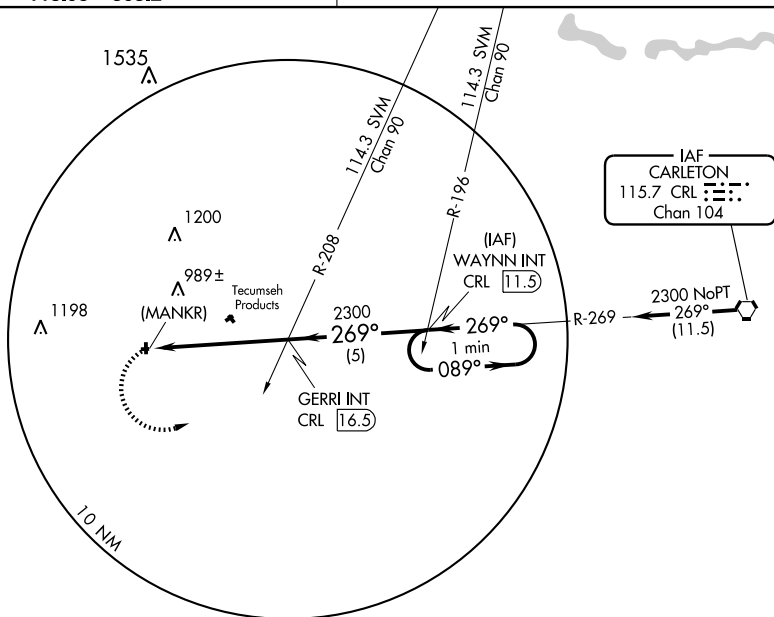
(SPRTN.SPRTN3) 10210

VORTAC CRL 115.7 Chan 104	APP CRS 269°	Rwy Idg TDZE Apt Elev	N/A N/A 815
---	------------------------	-----------------------------	--

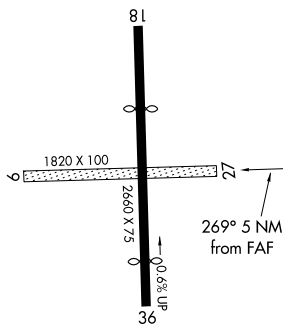
VOR or GPS-A

TECUMSEH/ MEYERS-DIVERS (3TE)

NA Use Detroit Willow Run altimeter setting.	MISSED APPROACH: Climbing left turn to 2300 via CRL R-269 to WAYNN 11.5 DME and hold.
DETROIT METROPOLITAN WAYNE COUNTY APP CON 118.95 363.2	CTAF 122.9

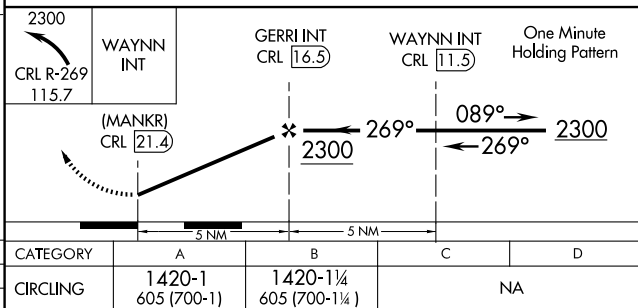


ELEV 815	Rwy 18 ldg 1880'
	Rwy 36 ldg 2160'

LIRL Rwy 18-36 **1**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



MERILLAT (34G) 3 SE UTC-5(-4DT) N41°58.50' W83°55.51'

**DETROIT
COPTER**

820 B S4 FUEL 100LL NOTAM FILE LAN

RWY 18-36: 3608X100 (TURF) LIRL

RWY 18: Thld dspcd 261'. Trees.

RWY 36: Thld dplcd 486'. Fence.

AIRPORT REMARKS: Attended 1400-2200Z+. Ultralight activity on and invof arpt. Rwy 18-36 opposite rwy not visible from thld. Rwy 18-36 LIRL not for public use. Airframe and power plant repairs by prior arrangement, call arpt attendant 517-423-7600. Rwy 18-36 marked with cones; dspcd thld marked with three 3' yellow cones each side. ACTIVATE rotating bcn—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

VAN CAMP'S HELIPORT (2T7) 5 NE UTC-5(-4DT) N42°01.15' W83°50.92'

**DETROIT
COPTER**

740 S4 NOTAM FILE LAN

HELIPAD H1: 90X50 (TURF)

HELIPORT REMARKS: Attended irregularly. Helipad H1 marked with cones. 35' tree 102' from heliport at 180°, apch ratio 2:1. 60' tree 80' from heliport at 270° apch ratio 2:1.

COMMUNICATIONS: CTAF 122.9

THOMPSONVILLE (7Y2) 2 W UTC-5(-4DT) N44°31.00' W85°58.51'

GREEN BAY

793 B NOTAM FILE LAN

RWY 09-27: H2900X75 (ASPH) D-12.5 LIRL

RWY 09: Thld dspcd 50'. Road. Rgt tfc.

RWY 27: PAPI(P2L)—GA 4.0° TCH 20'. Trees.

RWY 17-35: H2475X150 (TURF)

RWY 17: Thld dspcd 1220'. Trees.

RWY 35: Thld dspcd 1100'. Trees. Rgt tfc.

AIRPORT REMARKS: Unattended. Rwy 17-35 CLOSED Nov thru Mar and when snow covered. Rws not plowed. Rwy 17-35 surface rough. +450' unlighted ski hill ½ mile west of arpt. Radio controlled model acct, ultralight and glider activity. Arpt rotating bcn on ski hill 450' above arpt elevation 1.0 miles northwest. ACTIVATE LIRL Rwy 09-27 and PAPI Rwy 27—CTAF. Rwy 17-35 and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

THREE RIVERS MUNI DR HAINES (HAI) 2 NE UTC-5(-4DT) N41°57.59' W85°35.60'

CHICAGO

824 B S4 FUEL 100LL, JET A TPA-1824(1000) NOTAM FILE LAN

**L-281
IAP**

RWY 09-27: H4000X75 (ASPH) S-26, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.5° TCH 25'.

RWY 27: REIL. PAPI(P4L)—GA 3.5° TCH 29'. Trees.

RWY 05-23: H2729X60 (ASPH) S-16 MIRL

RWY 05: Road.

RWY 23: Road.

AIRPORT REMARKS: Attended 1300Z+—dusk. Rwy 05-23 PAEW. Snow plowing second priority, call to confirm conditions. Rwy 05 vertical clnc over road waived by FAA (10/06/2009) ALP apvl letter. Possibility of crop irrigation equipment ops in NE apch to Rwy 23. Radio controlled airplanes opr S of apch end Rwy 27. MIRL Rws 09-27 and Rwy 05-23 and PAPI Rwy 09 and Rwy 27 and REIL Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.975 (269) 273-6705.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z+)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z+)

RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' 187° 16.7 NM to fld. 870/1W.

NDB (MHW) 407 HAI N41°57.50' W85°35.50' on fld. NOTAM FILE LAN. OTS indef.

TOLEDO SUBURBAN (See LAMBERTVILLE)

TOPINABEE

PBEAAYE (Y3Ø) 3 NE UTC-5(-4DT) N45°31.87' W84°33.42'

LAKE HURON

690 NOTAM FILE LAN

RWY 01-19: 2470X90 (TURF)

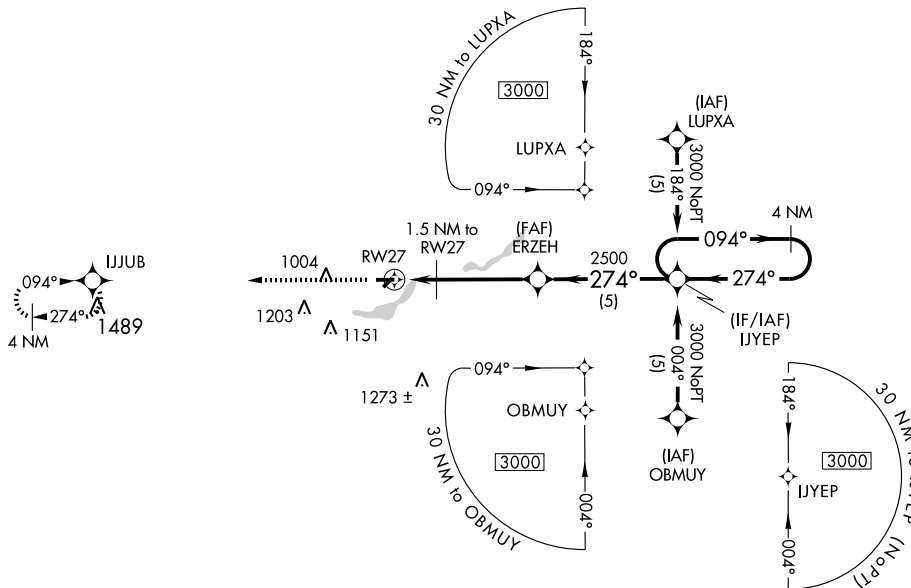
RWY 01: Thld dspcd 450'. Trees.

RWY 19: Thld dspcd 800'. Trees.

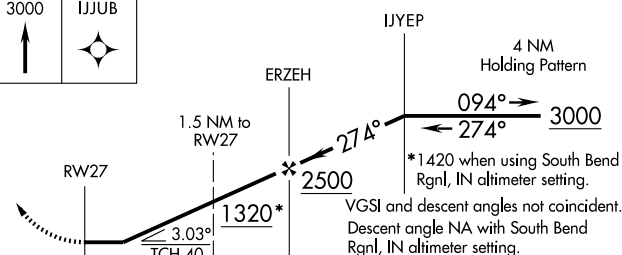
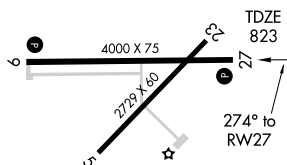
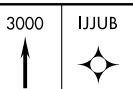
AIRPORT REMARKS: Attended irregularly. Deer and birds invof arpt. Winter ops skis only. Trees in primary sfc; all quadrants. Rwy 01-19 rwy sfc rolling terrain, rough. Rwy 01-19 and dspcd thlds marked with cones. +60' windsock located at north end.

COMMUNICATIONS: CTAF 122.9

TORCHPORT (See EASTPORT)

APP CRS
274°Rwy Idg **4000**
TDZE **823**
Apt Elev **824****RNAV (GPS) RWY 27**
THREE RIVERS MUNI DR. HAINES (HAI)Obtain local altimeter setting on CTAF; when not received, use South Bend altimeter setting.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.MISSED APPROACH: Climb to 3000
direct IJJUB WP and hold.AWOS-3
119.975KALAMAZOO APP CON ★
121.2 340.9UNICOM
122.8 (CTAF) ①

ELEV 824



CATEGORY	A	B	C	D
RNAV MDA	1200-1 377 (400-1)		1200-1½ 377 (400-1½)	NA
CIRCLING	1260-1 436 (500-1)		1420-1¾ 596 (600-1¾)	NA
SOUTH BEND RGNL, IN ALTIMETER SETTING MINIMUMS				
RNAV MDA	1360-1 537 (600-1)		1360-1½ 537 (600-1½)	NA
CIRCLING	1420-1 596 (600-1)		1560-2 736 (800-2)	NA

REIL Rwy 9 and 27 ①
MIRL Rwy 5-23 and 9-27 ①THREE RIVERS, MICHIGAN
Orig-A 10210

41°58'N - 85°36'W

THREE RIVERS MUNI DR. HAINES (HAI)
RNAV (GPS) RWY 27

VOR/DME AZO 109.0 Chan 27	APP CRS 187°	Rwy Idg TDZE Apt Elev 824	N/A N/A 824
---	------------------------	---	--------------------------

VOR or GPS-A

THREE RIVERS MUNI DR. HAINES (HAI)



Use Kalamazoo altimeter setting; when not received, use South Bend altimeter setting.

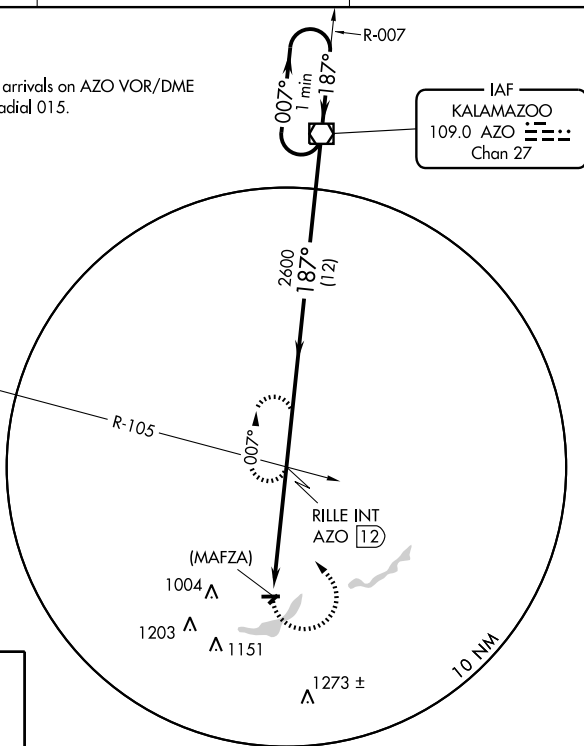
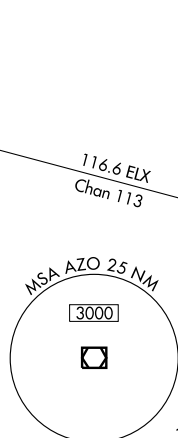
MISSED APPROACH: Climbing left turn to 2600 via AZO R-187 to RILLE Int and hold.

AWOS-3
119.975

KALAMAZOO APP CON ★
121.2 340.9

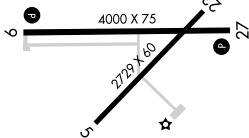
UNICOM
122.8 (CTAF) **0**

NoPT for arrivals on AZO VOR/DME
Airway radial 015.



ELEV 824

187° 4.7 NM
from FAF



REIL Rwys 9 and 27 **0**
MIRL Rwys 5-23 and 9-27 **0**

FAF to MAP 4.7 NM

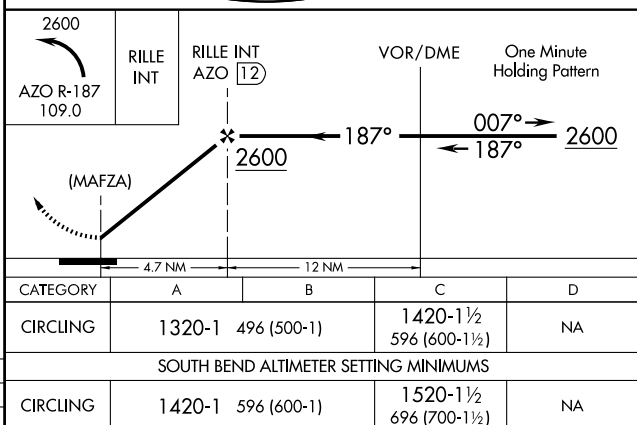
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

THREE RIVERS, MICHIGAN
Amdt 9A 10210

41°58'N - 85°36'W

THREE RIVERS MUNI DR. HAINES (HAI)

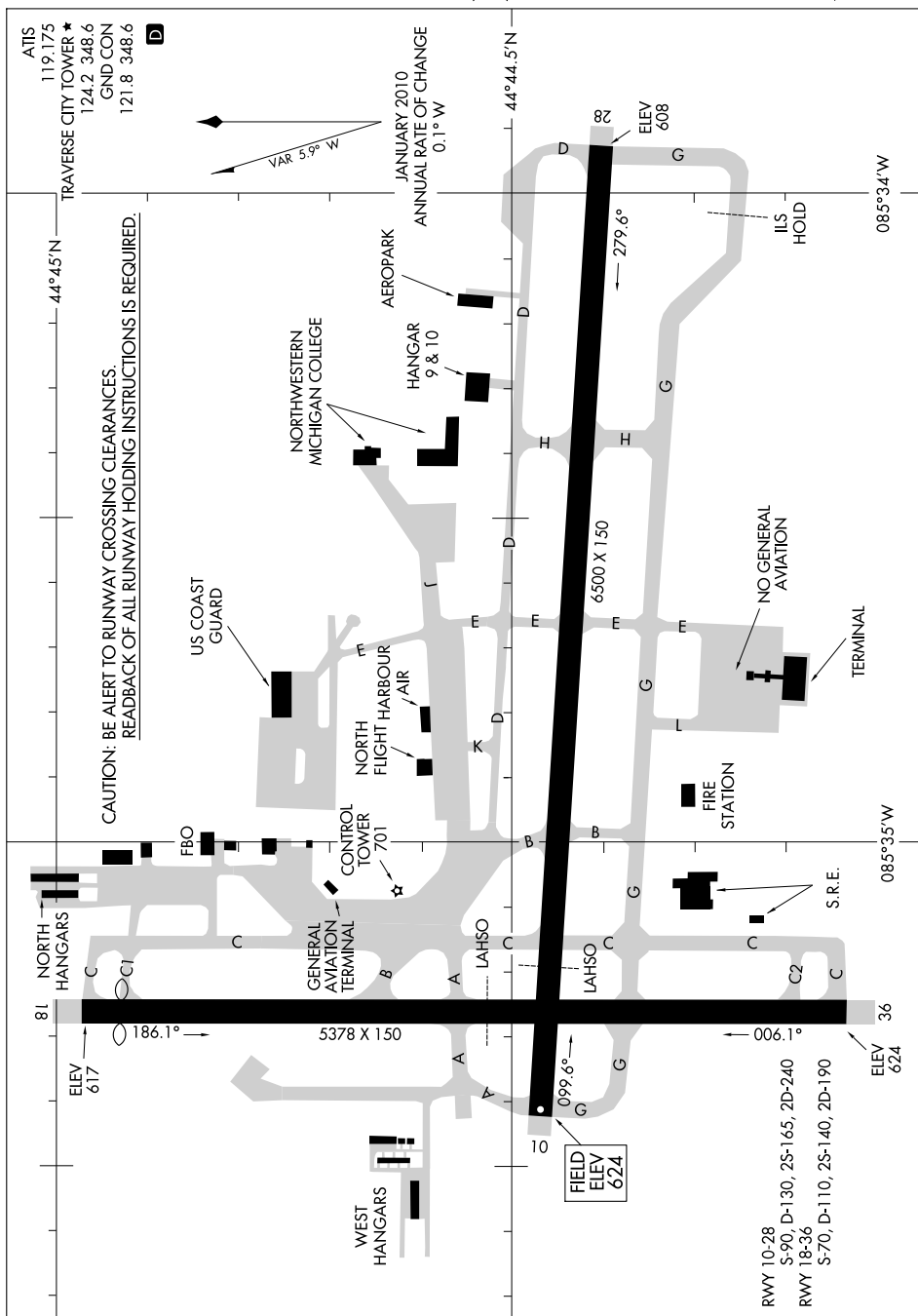
VOR or GPS-A



AIRPORT DIAGRAM

AL-425 (FAA)

TRAVERSE CITY / CHERRY CAPITAL (TVC)
TRAVERSE CITY, MICHIGAN



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

AIRPORT DIAGRAM

TRAVERSE CITY, MICHIGAN
TRAVERSE CITY / CHERRY CAPITAL (TVC)

10210

TRAVERSE CITY N44°40.07' W85°33.00' NOTAM FILE TVC.

(H) VORTACW 114.6 TVC Chan 93

345° 4.6 NM to Cherry Capital. 912/2W. HIWAS.

VOR portion unusable 276°–334° byd 20 NM blo 5000'. VOR portion unusable 063°–157° byd 16 NM blo 2600; 063°–157° byd 27 NM blo 5000'.

DME portion unusable 020°–335° byd 30 NM blo 3500'.

RCO 122.65 122.2 (LANSING RADIO)

GREEN BAY

H-2K, L-31B

TRAVERSE CITY

CHERRY CAPITAL (TVC) 2 S UTC–5(–4DT) N44°44.50' W85°34.94'

624 B S4 FUEL 100LL, JET A LRA Class I, ARFF Index B NOTAM FILE TVC

RWY 10–28: H6500X150 (ASPH–PFC) S–90, D–130, 2S–165, 2D–240 HIRL

RWY 10: VASI(V4L)—GA 3.0° TCH 46'. Tree.

RWY 28: MALSR. PAPI(P4L)—GA 2.9° TCH 52'. Tower.

RWY 18–36: H5378X150 (ASPH–PFC) S–70, D–110, 2S–140, 2D–190 MIRL

RWY 18: VASI(V4L)—GA 3.0° TCH 50'. Thld dsplcd 270'. Trees.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 50'. Tree.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 18	10–28	2850
RWY 28	18–36	5500

RUNWAY DECLARED DISTANCE INFORMATION

RWY 10:	TORA–6500	TODA–6500	ASDA–6500	LDA–6500
RWY 18:	TORA–5379	TODA–5379	ASDA–5109	LDA–4839
RWY 28:	TORA–6500	TODA–6500	ASDA–6500	LDA–6500
RWY 36:	TORA–5379	TODA–5379	ASDA–5109	LDA–5109

AIRPORT REMARKS: Attended Oct–Apr 1200–0200Z†, May–Sep

1200–0300Z†. During hrs when arpt is unattended call arpt ops

231–313–0928 or FBO at 231–929–1126. Arpt CLOSED to

unscheduled air carrier acft with over 30 passenger seats without

48 hour prior permission—call 231–947–2250. CAUTION: Birds and deer on and in/ov arpt. Twy C–1 east of

Twy C not avbl to air carrier acft. Snow removal ops in progress winter months, Snow Command will be

monitoring CTAF during non–twr hours. Acft ldg/departing TVC should announce their intentions on CTAF when

twr clsd. Flt crews should read back all advisory information provided by Snow Command. Arpt surface

conditions unmonitored btn 0600–0900Z†. ACTIVATE HIRL Rwy 10–28, MIRL Rwy 18–36, VASI Rwy 18 and

MALSR Rwy 28 and REIL Rwy 36—CTAF. Ldg fee based on acft weight, private owned single engine acft

exempt.

WEATHER DATA SOURCES: ASOS (231) 933–0401. HIWAS 114.6 TVC.

COMMUNICATIONS: CTAF 124.2 ATIS 119.175 UNICOM 122.95

TRAVERSE CITY RCO 122.65 122.2 (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 132.9

TRAVERSE CITY TOWER 124.2 (1200–0200Z, 1100–0200Z EDT) GND CON 121.8

AIRSPACE: CLASS D svc (1200–0200Z, 1100–0200Z EDT) other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

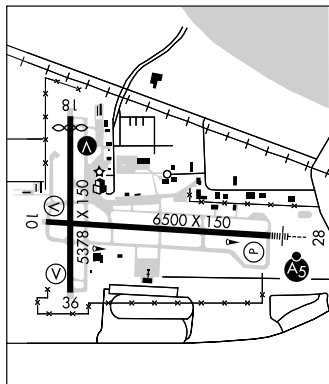
TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 345° 4.6 NM to fld. 912/2W.

HIWAS.

GWENN NDB (MH/LOM) 365 TV N44°44.07' W85°25.76' 279° 6.6 NM to fld. Unmonitored when twr clsd.

ILS 110.7 I–TVC Rwy 28. Class IE. LOM GWENN NDB. ILS and LOM unmonitored when twr clsd.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.



APP CRS 005°	Rwy Idg 5378 TDZE 624 Apt Elev 624
------------------------	---

GPS RWY 36

TRAVERSE CITY / CHERRY CAPITAL (TVC)



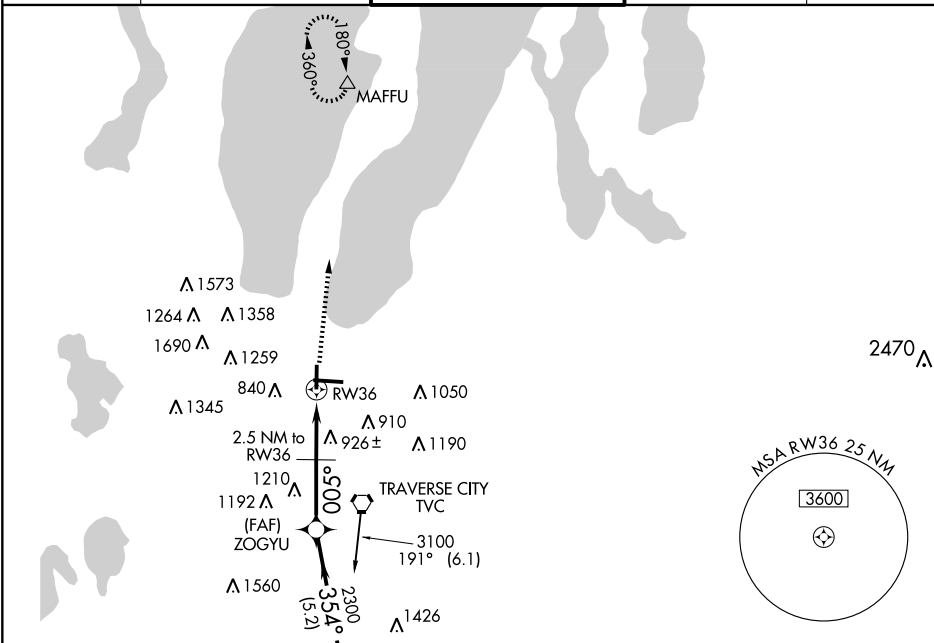
MISSED APPROACH: Climb to 3000
direct MAFFU WP and hold.

ATIS
119.175

MINNEAPOLIS CENTER
132.9 338.3

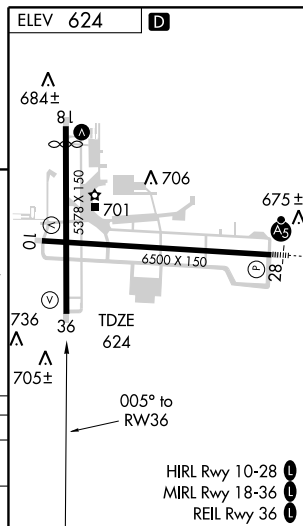
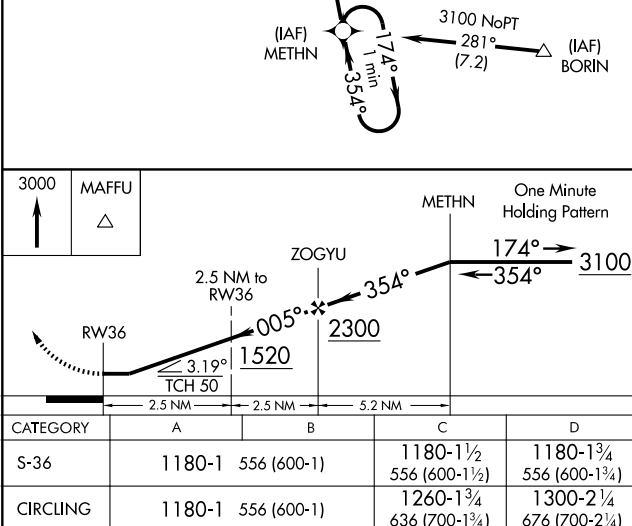
TRAVERSE CITY TOWER ★
124.2(CTAF) 348.6

GND CON
121.8 348.6

UNICOM
122.95

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



TRAVERSE CITY, MICHIGAN
Orig-A 09239

44°44'N - 85°35'W

TRAVERSE CITY / CHERRY CAPITAL (TVC)

GPS RWY 36

LOC I-TVC	APP CRS	Rwy Idg	6500
<u>110.7</u>	279°	TDZE	617
		Apt Elev	624

ILS RWY 28

TRAVERSE CITY / CHERRY CAPITAL (TVC)



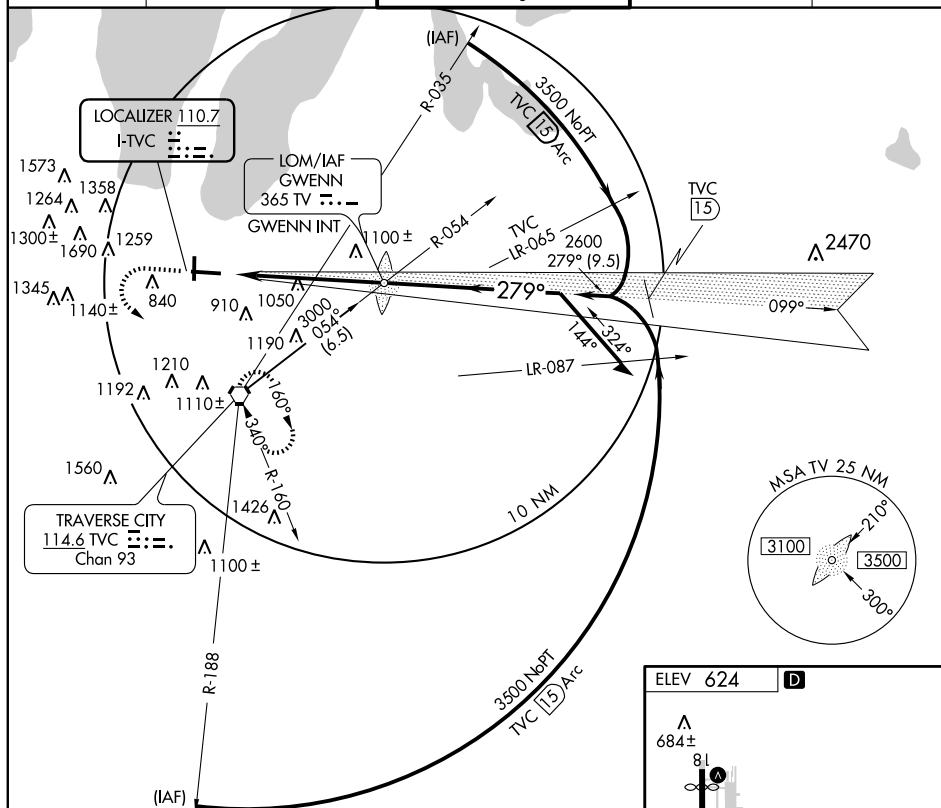
MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 direct TVC VORTAC and hold.

ATIS
119.175

MINNEAPOLIS CENTER
132.9 338.3

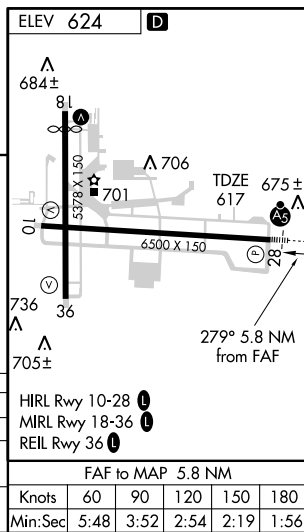
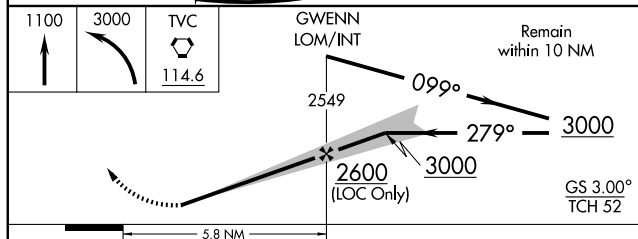
TRAVERSE CITY TOWER ★
124.2(CTAF) 348.6

GND CON
121.8 348.6

UNICOM
122.95

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010



TRAVERSE CITY, MICHIGAN
Amdt 12B 09239

44°44'N - 85°35'W

TRAVERSE CITY / CHERRY CAPITAL (TVC)

ILS RWY 28

LOM TV 365	APP CRS 279°	Rwy Idg TDZE Apt Elev	6500 617 624
----------------------	------------------------	-----------------------------	---

NDB or GPS RWY 28

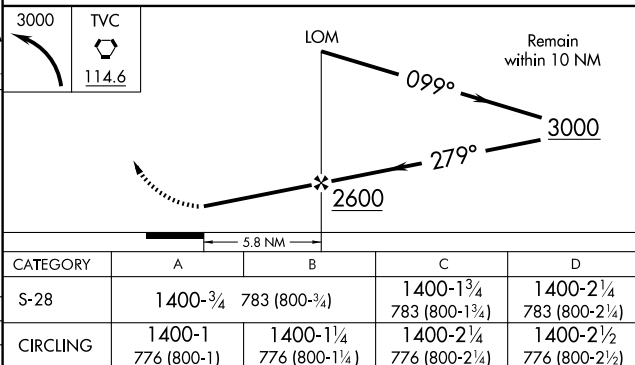
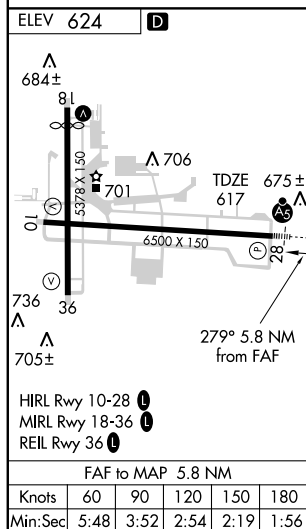
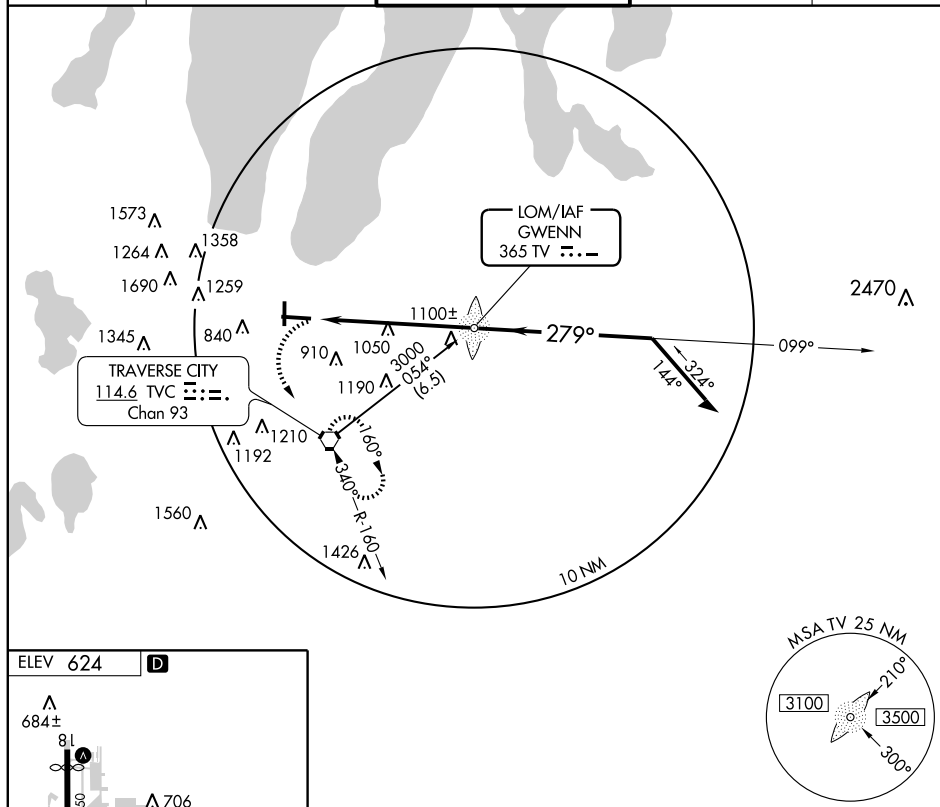
TRAVERSE CITY / CHERRY CAPITAL (TVC)

▽ For inoperative MALSR increase
▲ Cat B S-28 visibility ½ mile.



MISSED APPROACH: Climbing left turn to 3000 direct TVC VORTAC and hold.

ATIS 119.175	MINNEAPOLIS CENTER 132.9 338.3	TRAVERSE CITY TOWER ★ 124.2(CTAF) 348.6	GND CON 121.8 348.6	UNICOM 122.95
------------------------	--	---	-------------------------------	-------------------------



WAAS CH 42610 W10A	APP CRS 099°	Rwy Idg 6500 TDZE 624 Apt Elev 624
--	------------------------	---

RNAV (GPS) RWY 10

TRAVERSE CITY / CHERRY CAPITAL (TVC)

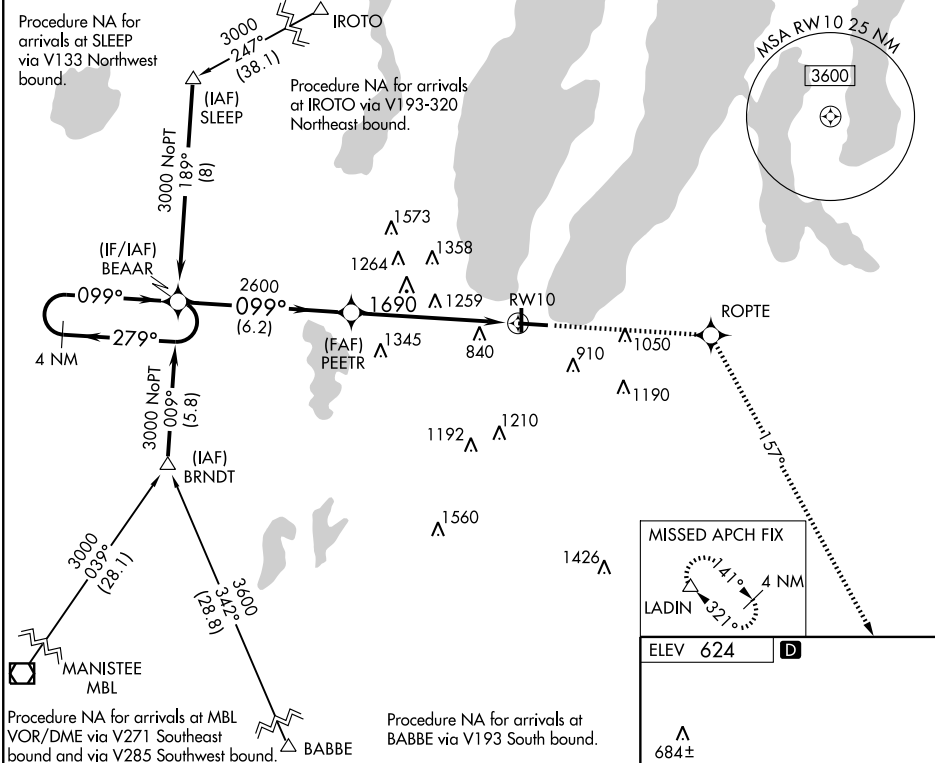
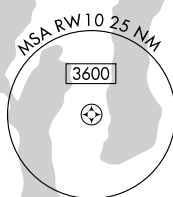
⚠ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
⚠ When local altimeter setting not received, use Bellaire altimeter setting and increase DA 51 feet and all MDA 60 feet, increase LPV all Cats. visibility ¼ mile. VDP NA when using Bellaire altimeter setting.

MISSED APPROACH: Climb to 4000 direct ROPTE and via 157° track to LADIN and hold.

ATIS 119.175	MINNEAPOLIS CENTER 132.9 338.3	TRAVERSE CITY TOWER* 124.2 (CTAF) 0 348.6	GND CON 121.8 348.6	UNICOM 122.95
------------------------	--	---	-------------------------------	-------------------------

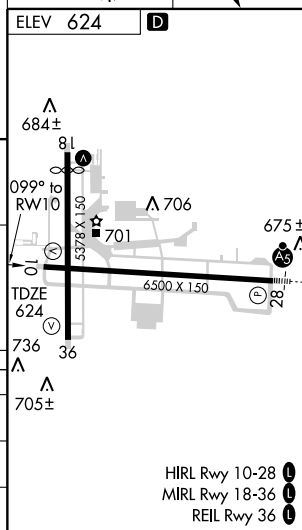
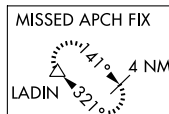
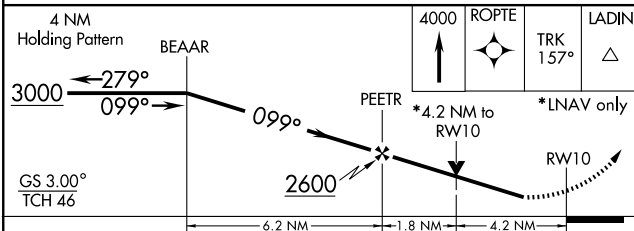
Procedure NA for arrivals at SLEEP via V133 Northwest bound.

Procedure NA for arrivals at IROTO via V193-320 Northeast bound.



Procedure NA for arrivals at MBL VOR/DME via V271 Southeast bound and via V285 Southwest bound.

Procedure NA for arrivals at BABBE via V193 South bound.



CATEGORY	A	B	C	D
LPV DA	968-1¼		344 (400-1¼)	
LNAB MDA	2000-1¼ 1376 (1400-1¼)	2000-1½ 1376 (1400-1½)	2000-3	1376 (1400-3)
CIRCLING	2000-1¼ 1376 (1400-1¼)	2000-1½ 1376 (1400-1½)	2000-3	1376 (1400-3)

VORTAC TVC 114.6 Chan 93	APP CRS 340°	Rwy Idg TDZE Apt Elev	N/A N/A 624
--	------------------------	-----------------------------	--

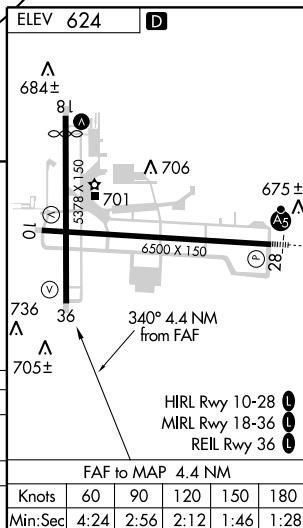
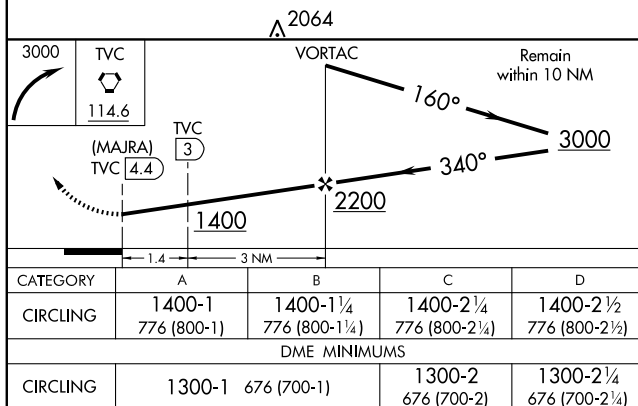
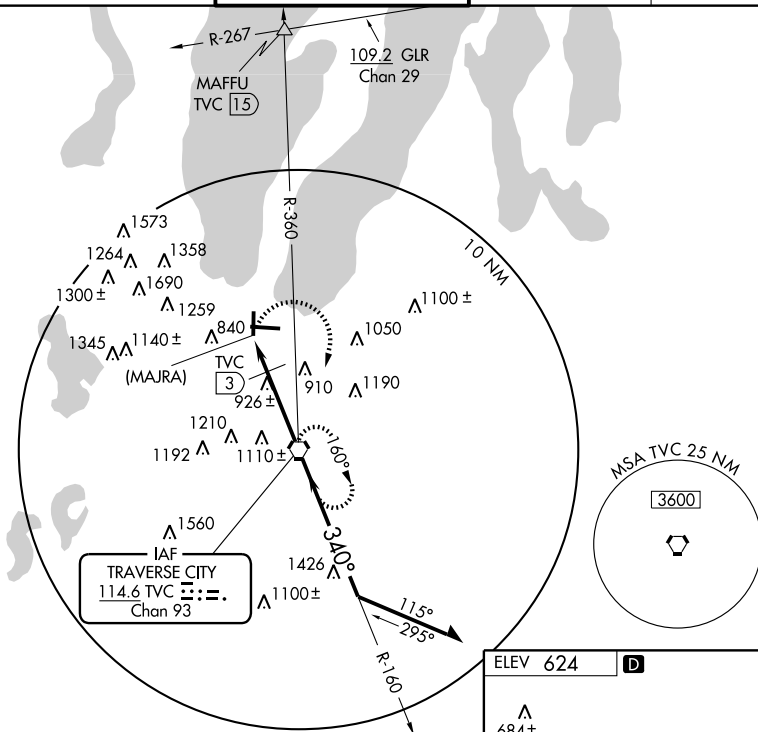
VOR or TACAN or GPS-A

TRAVERSE CITY / CHERRY CAPITAL (TVC)



MISSED APPROACH: Climbing right turn to 3000 direct TVC
VORTAC and hold. (TACAN aircraft climbing right turn to 3500
via TVC R-360 to MAFFU/Int 15 DME and hold N, RT, 180° inbound.)

ATIS 119.175	MINNEAPOLIS CENTER 132.9 338.3	TRAVERSE CITY TOWER ★ 124.2 (CTAF) 0 348.6	GND CON 121.8 348.6	UNICOM 122.95
------------------------	--	--	-------------------------------	-------------------------



SUGAR LOAF RESORT (YØ4) 14 NW UTC-5(-4DT) N44°54.75' W85°48.84'

825 NOTAM FILE LAN

RWY 02-20: H3519X50 (ASPH)

RWY 02: Trees. RWY 20: Thld dsplcd 572'. Trees.

AIRPORT REMARKS: Unattended. Ski hill adjacent to rwy NW side.

Adjacent ski facility CLOSED. +10' hill on each side of rwy, 10' from pavement edges in midsection of rwy. Pedestrians and golf course adjacent to rwy N end, pedestrians and equipment crossing rwy. Rwy 02-20 extensive pavement cracking.

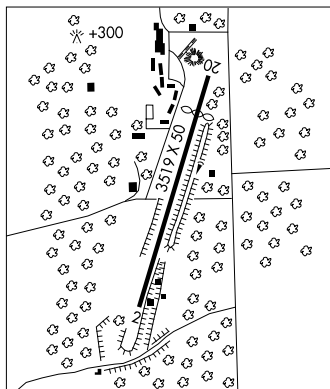
WEATHER DATA SOURCES: HIWAS 114.6 TVC.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07'

W85°33.00' 325° 18.5 NM to fld. 912/2W. HIWAS



TRIBE N45°03.70' W87°41.76' NOTAM FILE MNM.

NDB (LOM) 239 TN 035°4.6 NM to Menominee-Marinette Twin Co.

GREEN BAY

TRIPLE H (See PARCHMENT)

TRIPP CREEK (See ST JOHNS)

TROY

OAKLAND/TROY (VLL) 2 E UTC-5(-4DT) N42°32.58' W83°10.67'

727 B FUEL 100LL, JET A TPA-1727(1000) NOTAM FILE LAN

RWY 09-27: H3549X60 (ASPH) MIRL 0.7% up W

RWY 09: PAPI(P2R)-GA 4.0° TCH 30'. P-line.

RWY 27: PAPI(P2L)-GA 4.0° TCH 31'. Building.

AIRPORT REMARKS: Attended Sep-May Mon-Fri 1300-2300Z± Sat-Sun 1300-2300Z±, Jun-Aug Mon-Fri 1300-0100Z±, Sat-Sun 1300-2300Z±. Deer and birds on and in/ovf arpt. No touch and go landings or practice traffic patterns. Rwy 09 +3' berm 316' from thld. ACTIVATE MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27-CTAF.

WEATHER DATA SOURCES: AWOS-3 119.475 (248) 288-4649.

COMMUNICATIONS: CTAF/UNICOM 123.05

® DETROIT APP/DEP CON 126.85 CLNC DEL 121.725

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 124° 18.4 NM to fld. 1148/3W.

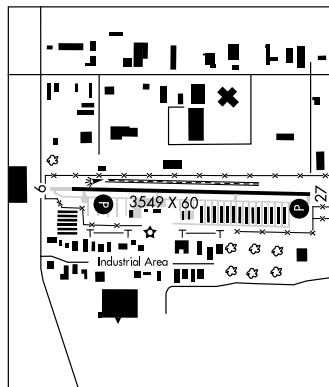
COMM/NAV/WEATHER REMARKS: For CLNC DEL key frequency 121.725 4 times. To contact FSS key freq 121.725 6 times. One second on/one second off; monitor 121.725 while electronic equipments dials Detroit CLNC DEL/Lansing FSS.

DETROIT

COPTER

L-28J, A

IAP



TULIP CITY (See HOLLAND)

TUSCOLA AREA (See CARO)

UNIVERSITY AIRPARK (See BATH)

VAN CAMP'S HELIPORT (See TECUMSEH)

VAN WAGNEN (See NAPOLEON)



NOTE: DME Required.

DETROIT, MICHIGAN

CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence

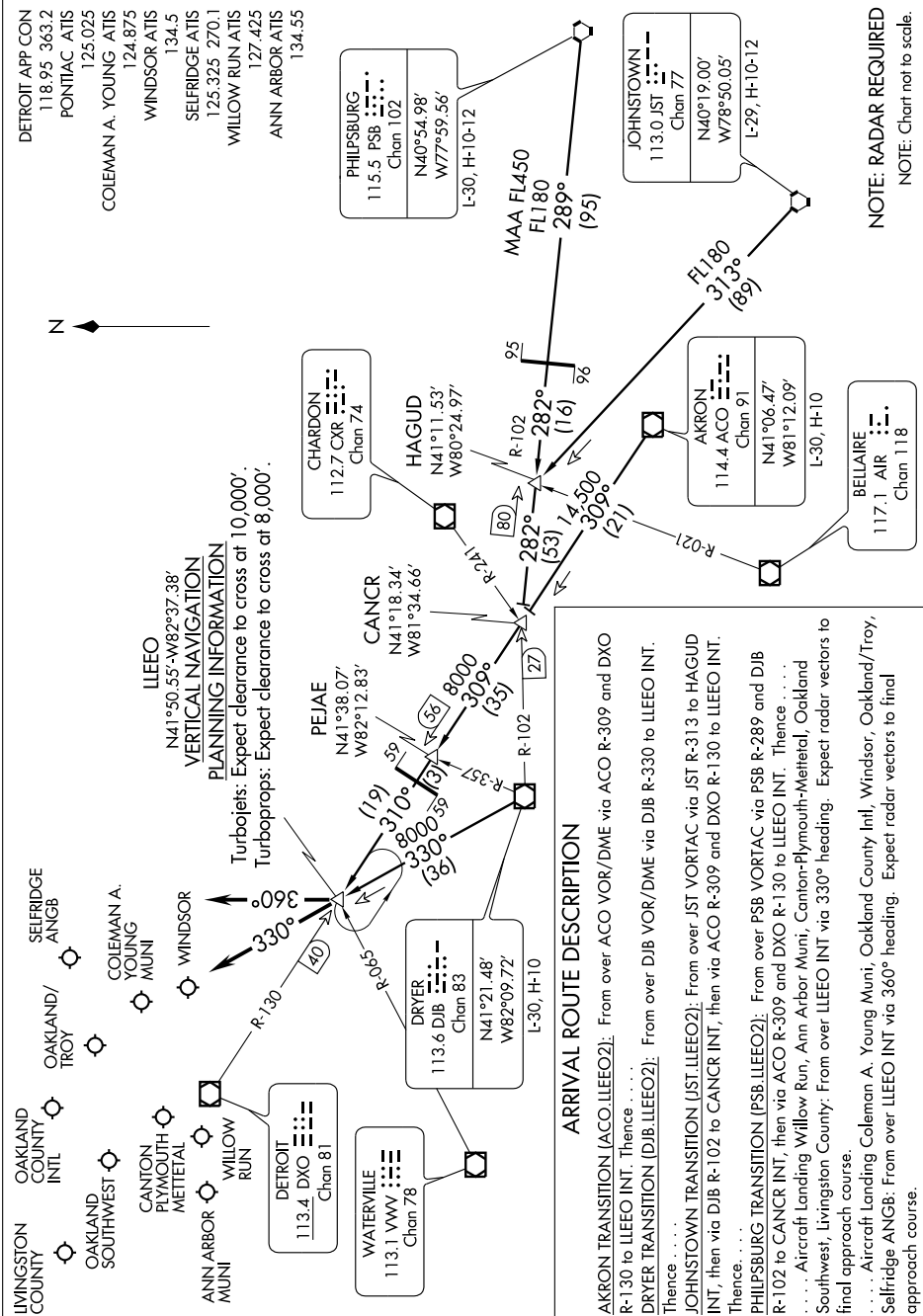
. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

LLEEO TWO ARRIVAL



LLEEO TWO ARRIVAL

RNAV (GPS) RWY 9

TROY / OAKLAND/TROY (VLL)

TROY / OAKLAND/TROY (VLL)

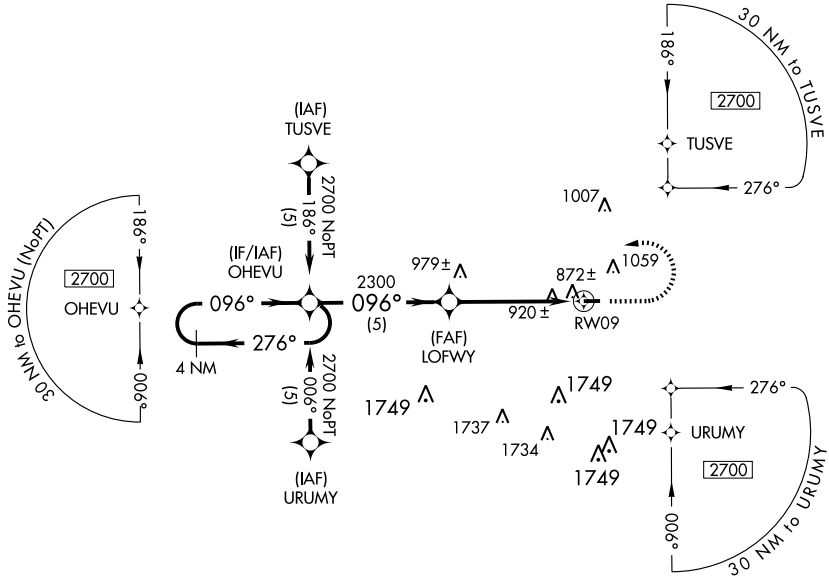
APP CRS 096°	Rwy Idg TDZE Apt Elev	3549 729 729
------------------------	-----------------------------	---



DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2200 then climbing left turn to 2700 direct OHEVU WP and hold.

AWOS-3 119.475	DETROIT APP CON 126.85 363.2	CLNC DEL 121.725	UNICOM 123.05 (CTAF) 0
--------------------------	--	----------------------------	---



EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

4 NM Holding Pattern

OHEVU

2700

276°

096°

096°

LOP/WY

2300

3.07°

TCH 40

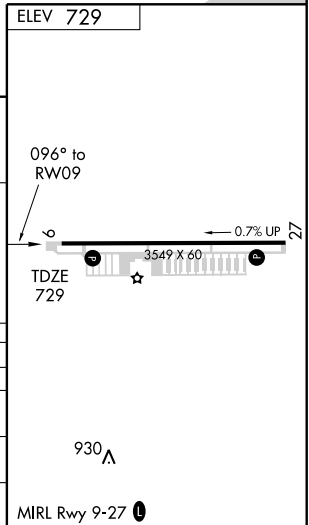
RW09

5 NM

4.8 NM

VGSI and descent angles not coincident.

2200	2700	OHEVU
↑	↪	✦



TROY, MICHIGAN
Orig-A 09239

42°33'N - 83°11'W

TROY / OAKLAND/TROY (VLL)
RNAV (GPS) RWY 9

RNAV (GPS) RWY 9

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

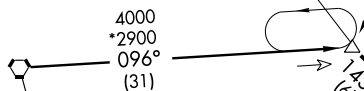
SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION

PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at
9000'.LIVINGSTON COUNTY
SPENCER J. HARDYPARKY
N42°38.16'
W83°54.57'

ANN ARBOR MUNI

DETROIT
113.4 DXO
Chan 81

MEYERS-DIVER'S

FLINT
116.9 FNT
Chan 116PONTIAC
111.0 PSI
Chan 47

ROMEO STATE

OAKLAND COUNTY
INTLSELFREDGE
ANG BASEOAKLAND/
TROYCOLEMAN A.
YOUNG MUNICANTON-
PLYMOUTH-
METTETAL

WINDSOR

GROSSE ILE
MUNI

CLUSTER

NOTE: This Star for use at
or above 9,000'.

NOTE: Chart not to scale.

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096
to SPRTN INT. Thence Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323
to PARKY INT. Thence

. . . . Expect radar vectors to final approach course.

SPRTN THREE ARRIVAL

(SPRTN.SPRTN3) 10210

DETROIT, MICHIGAN

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1, 26 AUG 2010 to 23 SEP 2010

SWWAN ONE ARRIVAL

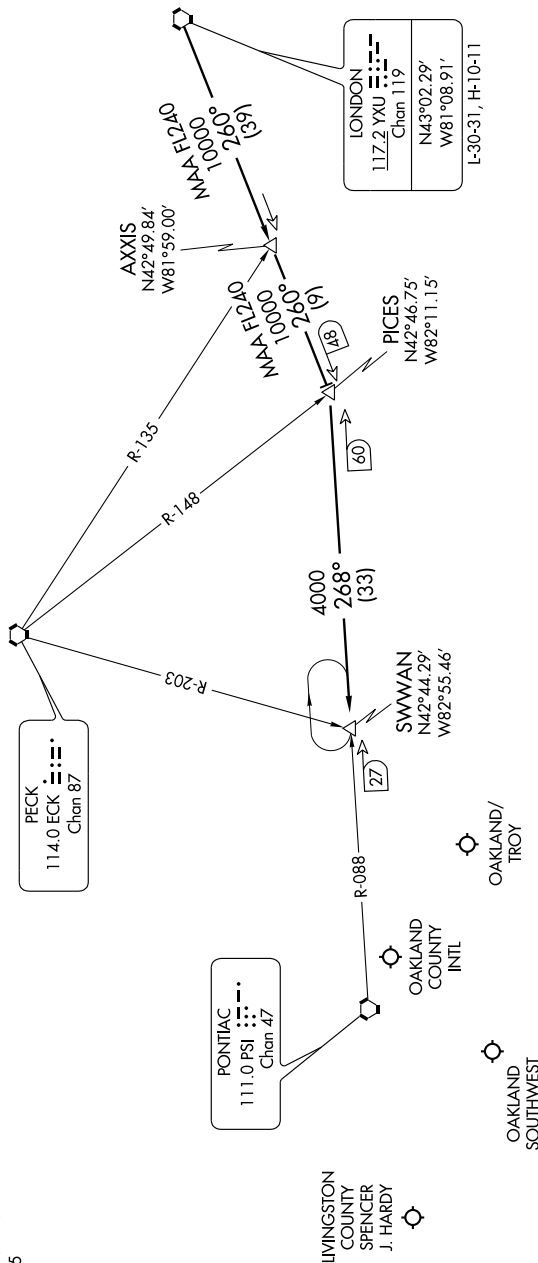
DETROIT APP CON
127.5 363.2
PONTIAC ATIS
125.025

SWWAN ONE ARRIVAL

(SWWAN.SWWAN1) 10042

ST-5052 (FAA)

PONTIAC, MICHIGAN



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT.
Thence

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.
NOTE: Chart not to scale.

EC-1, 26 AUG 2010 to 23 SEP 2010

VORTAC PSI
111.0
Chan **47**

APP CRS
124°

Rwy Idg
TDZE
Apt Elev

N/A
N/A
729

VOR or GPS-A

TROY / OAKLAND/TROY (VLL)



NA

Circling to Rwy 9 NA at night. Visibility reduction by helicopters NA. Use Coleman A. Young Muni altimeter setting.

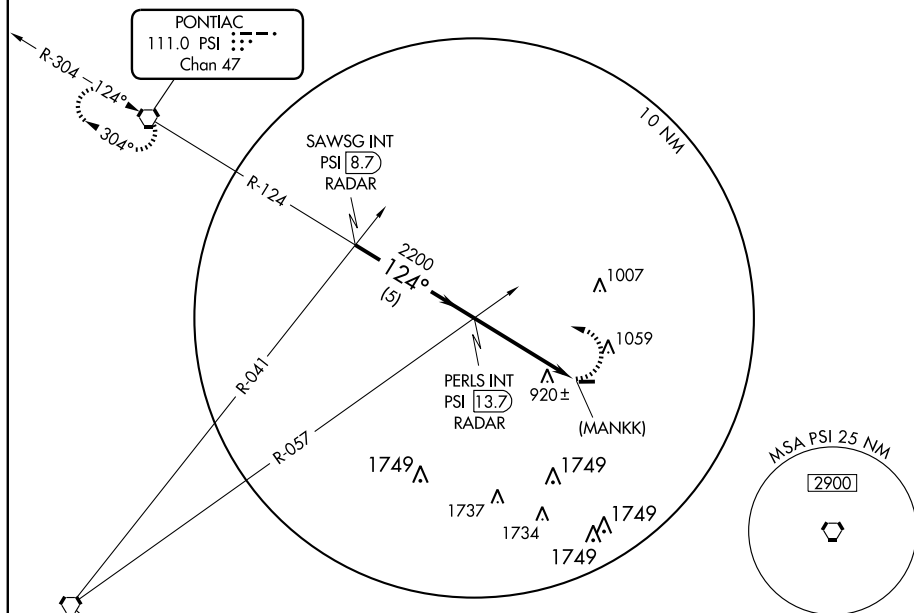
MISSED APPROACH: Climbing left turn to 3000 direct PSI VORTAC and hold.

AWOS-3
119.475

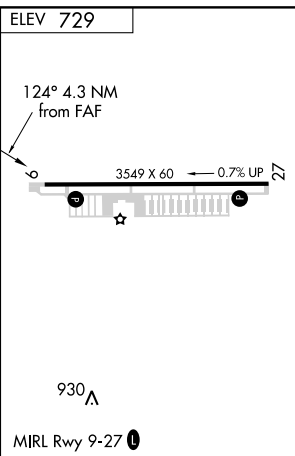
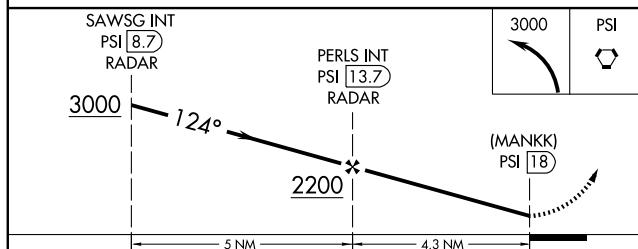
DETROIT APP CON
126.85 363.2

CLNC DEL
121.725

UNICOM
123.05 (CTAF) **0**



RADAR REQUIRED



CATEGORY

A

B

C

D

CIRCLING

1400-1 671 (700-1)

1400-2 671 (700-2)

NA

FAF to MAP 4.3 NM

Knots 60 90 120 150 180

Min:Sec 4:18 2:52 2:09 1:43 1:26

208

MICHIGAN

WATERVLIT MUNI

(40C) 1 NE UTC−5(−4DT) N42°12.00′ W86°15.00′

CHICAGO

656 NOTAM FILE LAN

RWY 02–20: 2600X200 (TURF)

RWY 02: Thld dsplcd 603′. Trees. RWY 20: Thld dsplcd 771′. Trees.

RWY 07–25: 1975X200 (TURF) (LOCAL USE ONLY)

RWY 07: Trees. RWY 25: Trees.

AIRPORT REMARKS: Unattended. Ultralight activity. Rwy 02–20 and Rwy 07–25 soft when wet and during spring; Rwys have poor drainage. Rwy 02–20 and dsplcd thld marked with 3′ yellow cones. Rwy 07–25 defined by mowing.

COMMUNICATIONS: CTAF 122.9

WAYLAND

CALKINS FLD

(41C) 1 N UTC−5(−4DT) N42°41.50′ W85°38.75′

CHICAGO

740 NOTAM FILE LAN

RWY 01–19: 2200X75 (TURF)

RWY 01: Thld dsplcd 800′. Building. RWY 19: Tree.

RWY 09–27: 1800X100 (TURF)

RWY 09: Thld dsplcd 200′. Trees. RWY 27: Tree.

AIRPORT REMARKS: Unattended. No snow removal—verify conditions call 616–889–5971 (manager’s cell) or 616–813–8903 (Asst mgr). Rwy 09–27 surface rough and uneven, soft when wet. Rwy 01–19 local use only. Rwy 09–27 and Rwy 01–19 and dsplcd thlds marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WEIDMAN

OJIBWA AIRPARK

(D11) 3NW UTC−5(−4DT) N43°43.20′ W85°00.17′

CHICAGO

950 NOTAM FILE LAN

RWY 05–23: 3600X125 (TURF) LIRL

RWY 05: Thld dsplcd 700′. Road. RWY 23: Thld dsplcd 400′. Trees.

AIRPORT REMARKS: Attended Apr–Nov irregularly. Arpt CLOSED when snow covered except ski equipped acft; approximately Nov thru Apr. Rwy 05 has 14′ road and 3′ fence at thld, and tall trees all quads. Rwy 23 E 400′ is soft when wet. Trees both sides of rwy. Rwy 05 and Rwy 23 marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WELKE

(See BEAVER ISLAND)

WELLS

(See ROCKFORD)

WEND VALLEY

(See CHARLOTTE)

WEST BRANCH COMMUNITY

(Y31) 3 SE UTC−5(−4DT) N44°14.69′ W84°10.79′

LAKE HURON

883 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 09–27: H5000X100 (ASPH) S–26 MIRL 0.4% up W

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees. RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.

AIRPORT REMARKS: Attended Mon–Fri 1300–2200Z‡, Sat–Sun 1400–2200Z‡. For attendant after hrs call 989–345–3524; svc charge. Deer on and invof arpt. ACTIVATE MIRL Rwy 09–27; PAPI and REIL Rwys 09 and 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.35 (LANSING RADIO)

MINNEAPOLIS CENTER APP/DEP CON 125.475

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

(T)VORW/DME 113.2 BXZ Chan 79 N44°14.57′ W84°11.03′ at fld. 884/6W.

DME unusable 020°–205° byd 19 NM blo 3000′, 205°–020° byd 19 NM blo 3500′.

WESTPHALIA

FOREST HILL

(3F5) 6SE UTC−5(−4DT) N42°54.74′ W84°40.53′

DETROIT

775 NOTAM FILE LAN

RWY 09–27: 2070X80 (TURF)

RWY 09: Trees. RWY 27: Trees.

RWY 18–36: 1900X80 (TURF)

RWY 18: Thld dsplcd 185′. Road. RWY 36: Thld dsplcd 380′. Tree.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt. Rwy 09–27 and Rwy 18–36 soft in spring. Rwy 09 has a 30′ p–line in apch 606′ from thld. Rwy 09–27 and Rwy 18–36 edges and dsplcd thlds marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WEXFORD CO

(See CADILLAC)

APP CRS **095°**
Rwy Idg **5000**
TDZE **877**
Apt Elev **882**

RNAV (GPS) RWY 9

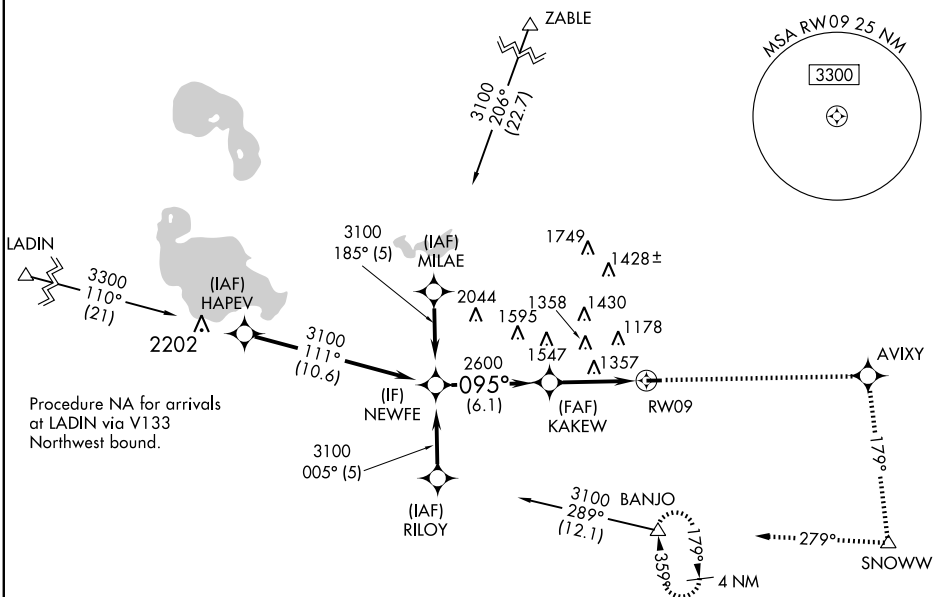
WEST BRANCH COMMUNITY (Y31)

⚠ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDA 140 feet, increase LNAV Cat A visibility ¼ mile and Cat C/D ½ mile, increase Circling Cat A visibility ¼ mile and Cat C/D ½ mile.

MISSED APPROACH: Climb to 4000 direct AVIXY and via track 179° to SNOWWW and via track 279° to BANJO and hold.

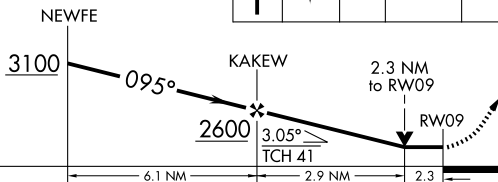
MINNEAPOLIS CENTER
125.475 269.45

UNICOM
122.8 (CTAF) 0



Procedure
Turn
NA

4000	AVIXY	SNOWWW	BANJO
↑	✱	△	△
TRK 179°	TRK 279°	TRK 279°	TRK 279°



ELEV 882



CATEGORY	A	B	C	D
LNAV MDA	1660-1 783 (800-1)	1660-1¼ 783 (800-1¼)	1660-2¼ 783 (800-2¼)	1660-2½ 783 (800-2½)
CIRCLING	1660-1 778 (800-1)	1660-1¼ 778 (800-1¼)	1660-2¼ 778 (800-2¼)	1660-2½ 778 (800-2½)

REIL Rwy 9 and 27 0
MIRL Rwy 9-27 0

APP CRS **275°**
Rwy Idg **5000**
TDZE **877**
Apt Elev **882**

RNAV (GPS) RWY 27

WEST BRANCH COMMUNITY (Y31)

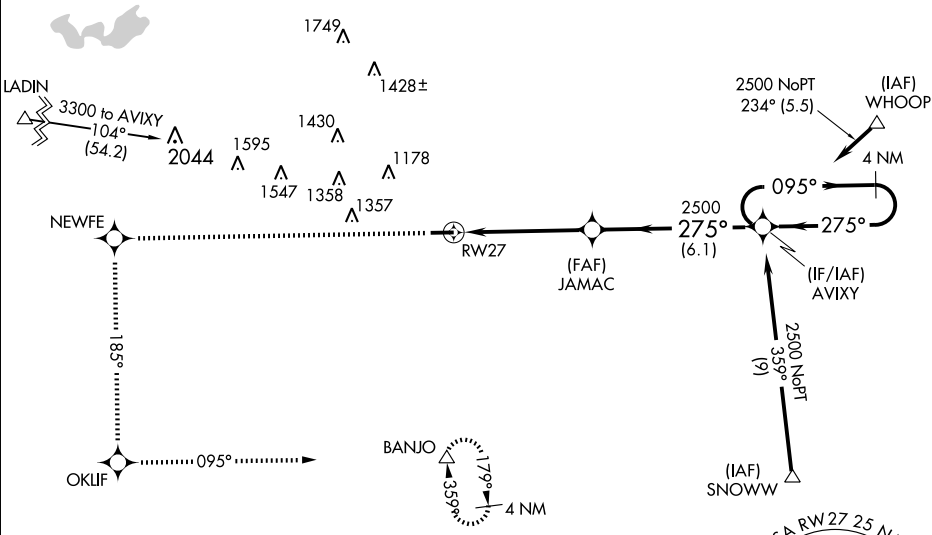
▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDA 140 feet, increase LNAV visibility Cat C/D ¼ mile and Circling Cat C/D visibility ½ mile.

MISSED APPROACH: Climb to 4000 direct NEWFE and via track 185° to OKUF and via track 095° to BANJO and hold.

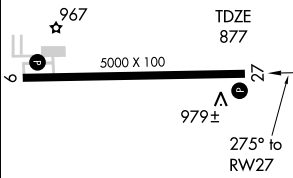
MINNEAPOLIS CENTER
125.475 269.45

UNICOM
122.8 (CTAF) 0

Procedure NA for arrivals at LADIN via V133 Northwest bound.



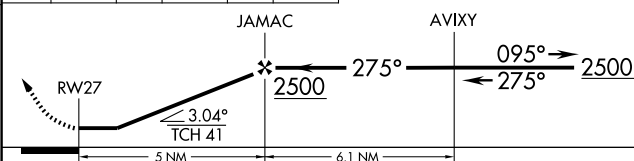
ELEV 882



REIL Rwy 9 and 27 **0**
MIRL Rwy 9-27 **0**

4000	NEWFE	TRK 185°	OKUF	TRK 095°	BANJO
					△

4 NM Holding Pattern

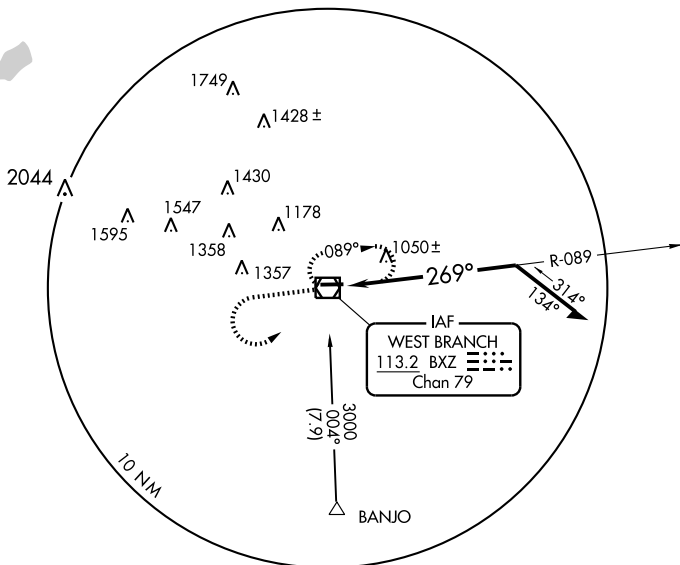


CATEGORY	A	B	C	D
LNAV MDA	1240-1	363 (400-1)	1240-1½	363 (400-1½)
CIRCLING	1480-1	598 (600-1)	1480-1½	1520-2
			598 (600-1½)	638 (700-2)

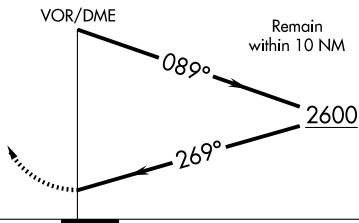
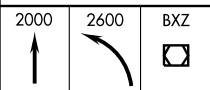
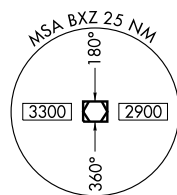
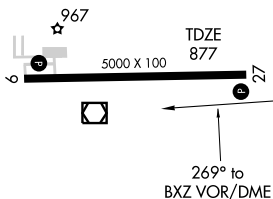
VOR RWY 27
WEST BRANCH COMMUNITY (Y31)

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 direct BXZ VOR/DME and hold.

UNICOM
122.8 (CTAF) **L**



ELEV 883



CATEGORY	A	B	C	D
S-27	1360-1	483 (500-1)	1360-1¼ 483 (500-1¼)	1360-1½ 483 (500-1½)
CIRCLING	1480-1	597 (600-1)	1480-1½ 597 (600-1½)	1520-2 637 (700-2)

WEST BRANCH COMMUNITY (Y31)

44°15'N - 84°11'W

VOR RWY 27

EC-1, 26 AUG 2010 to 23 SEP 2010

EC-1. 26 AUG 2010 to 23 SEP 2010